

APPENDIX N

Socioeconomic Report



FINAL

Socio-Economic Impact Study
for the Proposed
Graton Rancheria Hotel/Casino
Project

Submitted to:
David Zweig
Analytical Environmental
Services

February 8, 2008

February 8, 2008

David Zweig
Analytical Environmental Services
2021 N Street, Suite 200
Sacramento, CA 95814

Dear Mr. Zweig:

Bay Area Economics (BAE) is pleased to submit this Socio-Economic Benefits Study and Fiscal Impact Analysis for the proposed Graton Rancheria Casino/Hotel Project. We have prepared this report to provide to you information regarding:

- Total direct, indirect, and induced economic impacts from both the construction and operation phases of the project, and specified alternatives.
- Potential fiscal impacts generated by the project and alternatives to the City of Rohnert Park and Sonoma County.
- Various market, growth inducing, and social impact issues.

This update to the analysis incorporates the comments from Sonoma County, the BIA, and the NIGC.

It has been pleasure to work with you on this exciting project. Please do not hesitate to contact me if you have any questions, at 530-750-2195.

Sincerely,

Matt Kowta
Principal

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Executive Summary

Analytical Environment Services (AES) retained Bay Area Economics (“BAE”) to prepare an economic impact study and fiscal impact analysis for the proposed Graton Rancheria Casino, to be located in Sonoma County, adjacent to Rohnert Park. The purpose of the study is to examine the economic, fiscal, and social effects of the proposed Graton Rancheria Casino on the Rohnert Park and Sonoma County communities.

Project Description

The proposed Graton Rancheria casino will be located on the northwestern boundary of Rohnert Park in Sonoma County. The 253 acre site would be bordered by Wilfred Avenue, residences, and farmland to the north; Stony Point Road, residences, farmland, and a dairy to the west; Business Park Drive, light industrial land uses, Rohnert Park Expressway, and farmland to the south; and a business park and farmland to the east.¹ In addition, this study examines the economic and fiscal impacts of seven other potential scenarios for the site and/or casino. The various options examined include:

- The proposed 762,300 square foot casino at the proposed location, known as the “Wilfred Site”
- The proposed 762,300 square foot casino a first alternate on-site location on the western boundary of Rohnert Park in Sonoma County, known as the “Stony Point Site”
- The proposed 762,300 square foot casino at a second alternate on-site location on the western boundary of Rohnert Park in Sonoma County, also on the “Stony Point Site”
- A reduced intensity, 413,400 square foot casino at the “Stony Point Site”
- The proposed 762,300 square foot casino at an alternate off-site location in southern Sonoma County near the intersection of Lakeville Highway and Highway 37, known as the “Lakeville Site”
- A 500,000 square foot business park
- No Action - Assumes development under the Northwest Specific Plan. Includes 498 residential units, and 151,000 square feet of commercial retail space
- A reduced intensity, 413,400 square foot casino at the “Wilfred Site”

Key project characteristics of the proposed casino include:

- Will employ between 2,200 and 2,600 full-time workers, with an average of 2,400 workers.
- Will occupy 762,000 square feet of floor space.
- Will generate annual receipts between \$484 million and \$581 million, with an average of \$533 million.

¹ Analytical Environmental Services. *Graton Rancheria Hotel and Casino Project Updated Preliminary Project Information Package*. August, 2005.

Construction Phase Impacts

The construction phase will generate substantial economic activity within Sonoma County and the larger nine county Bay Area² region. Assuming a 27-month construction period, the proposed project will have the following impacts:

Summary of Annual Construction Phase Impacts

Area/Impact (a)	Direct	Indirect	Induced	Total
Sonoma Output	\$450 million	\$103 million	\$215 million	\$768 million
Bay Area Output	\$450 million	\$123 million	\$221 million	\$794 million
Sonoma Employment (b)	750	490	990	2,230
Bay Area Employment (b), (c)	750	540	990	2,280

Notes:

(a) 2004 dollars

(b) Direct employment estimates come from the project description, rather than IMPLAN

(c) Includes output related to services that will be provided to proposed casino users by outside vendors. This portion of output is assumed to be new to Sonoma County, but not new to the Bay Area. Therefore, the output figure for the Bay Area is less than the figure for Sonoma County.

Sources: Station Casinos, 2004; IMPLAN 2004; Bay Area Economics, 2004

Operating Phase Impacts

Once the proposed project opens, it is expected to generate up to \$581 million in receipts. Based on the range suggested by high and low operating budget scenarios defined for the purposes of this study, the proposed project will have the following mid-range annual impacts in Sonoma County and the larger Bay Area region:

Summary of Annual Operating Phase Impacts

Area/Impact (a)	Direct	Indirect	Induced	Total
Sonoma Output, millions of dollars	\$255	\$66	\$70	\$391
Bay Area Output, millions of dollars	\$255	\$77	\$75	\$407
Sonoma Employment (b)	2,400	730	750	3,880
Bay Area Employment (b), (c)	2,400	820	750	3,970

Notes:

(a) 2004 dollars

(b) Direct employment estimates come from the project description, rather than IMPLAN

(c) Includes output related to services that will be provided to the proposed casino users by outside vendors. This portion of output is assumed to be new to Sonoma County, but not new to the Bay Area. Therefore, the output figure for the Bay Area is less than the figure for Sonoma County.

Sources: Station Casinos, 2004; IMPLAN 2004; Bay Area Economics, 2004

Growth Inducing Impacts

Typically, the major potential for a new economic development project, such as a casino, to create growth inducing impacts in a local economy is due to its need for employees to fill the jobs it creates. This study estimates the total employment associated with the direct jobs generated by the project for Rohnert Park, Santa Rosa, and the surrounding region. It then evaluates the extent

² The nine county Bay Area includes: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties.

to which the employees to fill the new jobs can be drawn from the existing pool of residents who are already living in the area and are unemployed, or are not in the work force but could potentially be attracted to the work force based on the ready availability of jobs. The analysis found that there are adequate potential employees already living within the area to fill the new jobs, without needing to import more workers (and hence new residents) from outside the area. This means that the potential growth inducing impacts of the proposed casino project are minimal. Because there will not be additional residential demand associated with the proposed project, we do not foresee significant increases in local commercial demand stemming from the increased number of local jobs, except to the extent that some people previously employed or not in the labor force would obtain jobs and increase their disposable income, which could then create additional demand for local goods and services. In turn, this demand for local goods and services could create some additional demand for retail facilities, if existing facilities were not able to accommodate the increased demand. Indirect and induced economic impacts within the local economy may also create growth inducing impacts; however, these impacts are expected to be diffuse and distributed among many different businesses in many different sectors located throughout Sonoma County and the greater Bay Area, meaning that it would be purely speculative to predict where and how these impacts will be felt.

Fiscal Impacts

An MOU negotiated between the Tribe and the City of Rohnert Park calls for the Tribe to make annual payments of almost \$10 million to the City to mitigate any anticipated as well as unforeseen fiscal impacts from the project.³ Based on this and the recognition that the City will have a limited direct increase in service responsibility as a result of the proposed casino, we believe that the City of Rohnert Park will be adequately mitigated for any potential fiscal impacts that it could experience as a result of the proposed project. On the other hand, Sonoma County has not yet negotiated any type of mitigation agreement for the proposed project. This study has estimated the net cost to the County to provide services to the proposed project at between \$153,800 and \$181,700 annually, **after** accounting for the fact that the Tribe would likely contract with the City for fire and emergency services due to the proposed site's distance from the City and contributions for City fire station facilities outlined in the MOU.

Operating Period Market Impacts

This study examined the potential impacts of the proposed project on other nearby Indian casinos. The analysis indicates that the existing casinos in Geyserville and Middletown could experience declines of between 13 and 22 percent due to the fact that the new casino would be closer to their core Bay Area population base, based on current market area population gambling characteristics. We have also compiled and analyzed data that make a strong case that as the availability of gaming machines in an area increases, the local population's casino participation rate and frequency of visits also increases. In sum, we believe the net effect of adding a new casino at Graton (either at the Wilfred Site or the Lakeville Site) will be for the existing casinos to capture a somewhat reduced share of a significantly expanding pool of casino demand, such that their likelihood of losing economic viability as a result of the proposed project is low. In the unlikely event that either existing casino became unprofitable, they would likely have options to restructure

³ As the Tribe is moving the location of the proposed casino, it will renegotiate the MOU with the City. However, casino representatives do not estimate changes to the previously negotiated payment schedule.

their operations to match their lower revenues or implement new strategies in order to become more competitive and retain their sales volumes. At the regional scale, the data indicate that even if the Graton project provides an estimated 2,000⁴ additional gaming machines, the northern California casino market will still have a much lower saturation of gaming machines than the average of a sample of 29 gaming states compiled for this study.

Social Impacts

Although interviews with law enforcement and social service providers in several other California casino communities did not suggest that the casino would have a negative social impact on the communities, the literature suggests that casinos do adversely affect local crime rates and bankruptcy rates. The literature suggests that in the first year of operations, the casino will result in additional auto thefts. However, over time, as some casino patrons develop into problem and pathological gamblers and exhaust their resources, violent crime rates and property crime rates will increase, and continue to increase. The literature also suggests that the presence of a casino results in a higher rate of resident problem and pathological gamblers than in counties without a casino, and that these gamblers are more likely to file bankruptcy than the general population. Although some studies have preliminarily examined the relationship between gambling and other mental health issues, including addiction, not enough evidence exists to suggest a causal link between having a local casino and other mental health and addiction disorders.

⁴ This is an estimate for planning purposes, based on the proposed casino floor size.

Introduction

The purpose of this study is to estimate the potential socioeconomic impacts from the proposed Graton Rancheria casino and hotel. Along with the proposed casino, this study also assessed the impacts of four other alternatives to the project including a reduced-intensity plan, and a business park.

There are five main portions of this analysis. First, the economic impact portion of the analysis evaluated the economic benefits to Sonoma County and the Bay Area of the construction and operations of the proposed project and other alternatives. The portion of the study begins with a characterization of the construction and operating phases, as outlined by the Station Casinos staff. The study then proceeds with descriptions of the direct, indirect, and induced economic impacts of the proposed casino's construction and operating phases on the city economy. Second, the fiscal analyses determined the relative fiscal impact that the casino would have on the City of Rohnert Park and Sonoma County. This portion of the study looks at impacts such as increased traffic that the casino would have on the City and County, and the mitigation figures specified in the MOU in order to determine whether the casino will have a net positive or negative impact on the City and the County. Third, the study uses Census 2000 Journey-to-work data in order to assess potential growth inducing impacts within Rohnert Park and other Sonoma County areas in order to determine the increase in housing demand associated with the proposed casino for each area. Next, the analysis looks at the likely environmental justice issues for the proposed project and alternatives, exploring the effects of the proposed project on other competitive casinos operated by other tribes. Finally, the analysis looks at the effects of the proposed casino on social justice issues, and the impact of the proposed casino on local law enforcement, and social programs.

Proposed Project and Alternatives

This study examines the economic and fiscal impacts of seven potential scenarios for the site and/or casino, including:

- The proposed 762,300 square foot casino at the proposed location, known as the “Wilfred Site”
- The proposed 762,300 square foot casino at a primary alternate on-site location, known as the “Stony Point Site”
- The proposed 762,300 square foot casino a second alternate on-site location on the western boundary of Rohnert Park in Sonoma County, also on the “Stony Point Site”
- A reduced intensity, 413,400 square foot casino at the “Stony Point Site”
- The proposed 762,300 square foot casino at an alternate off-site location in southern Sonoma County near the intersection of Lakeville Highway and Highway 37, known as the “Lakeville Site”
- A 500,000 square foot business park
- No Action – Includes the development of 498 residential units, and 151,000 square feet of commercial retail development, per the Northwest Specific Plan
- A reduced intensity, 413,400 square foot casino at the “Wilfred Site”

Table 1 shows the relevant statistics for the proposed casino alternative scenarios.

Table 1: Summary of Relevant Statistics on Alternatives

Category	Alternative A Proposed Action	Alternative B First Alternate On-Site Location	Alternative C Second Alternate On-Site Location	Alternative D Reduced Intensity	Alternative E Business Park	Alternative F Alternate Off-Site Location	Alternative G No Action	Alternative H Reduced Intensity
Location	Central Sonoma County adjacent to northwestern border of Rohnert Park	Central Sonoma County adjacent to western border of Rohnert Park Northwest corner of property.	Central Sonoma County adjacent to western border of Rohnert Park Northeast corner of property.	Central Sonoma County adjacent to western border of Rohnert Park Northwest corner of property.	Central Sonoma County adjacent to western border of Rohnert Park Northwest corner of property.	Southern Sonoma County north of State Route 37 and west of Lakeville Highway.	Central Sonoma County adjacent to northwestern border of Rohnert Park	Central Sonoma County adjacent to northwestern border of Rohnert Park
Number of Acres	253	363	363	363	363	321	63	253
Number of Residential Units							229	
High Density, For Sale							266	
High Density, Rental								
Square Feet by Type of Use								
Casino, Including Retail	204,850	204,850	204,850	174,850		204,850		174,850
Food and Beverage	83,400	83,400	83,400	75,400		83,400		75,400
Entertainment	49,900	49,900	49,900	8,000		49,900		8,000
Bar/quiet	70,000	70,000	70,000	35,000		70,000		35,000
Hotel	305,750	305,750	305,750	91,750		305,750		91,750
Spa	27,100	27,100	27,100	7,100 (a)		27,100		7,100 (a)
Central Plant	21,300	21,300	21,300	21,300		21,300		21,300
Light Industrial Businesses					400,000			
Commercial Businesses (b)					100,000			
Total Square Feet, Commercial	762,300	762,300	762,300	413,400	500,000	762,300	151,000	413,400
Total Number of Units, Residential	0	0	0	0	0	0	495	0
Number of Parking Spaces								
Surface	4,404	4,404	4,404	2,850	2,000	4,000		2,650
Parking Structure	2,000	2,000	2,000	2,000	0	2,000		2,000
Total Number of Parking Spaces	6,404	6,404	6,404	4,850	2,000	6,000	604 (c)	4,650

Notes

- (a) Under Alternatives D and H there is no spa. The square footage estimates refer to the pool/reelrooms, pool concessions, and pool grill.
- (b) Commercial space is assumed to be office space for the business park and retail space for the no action alternatives.
- (c) Assumes a constant ratio of parking spaces to commercial square feet for the business park and no action alternatives.

Sources: AES, 2006; Bay Area Economics, 2006

Direct Impacts of the Casino Facility on the Local Economy

The economic impact study begins with the definition of the construction and operating phases for the proposed casino, reduced intensity casino, business park, and No Action alternatives. The study focuses on the construction and operating budgets in order to ascertain the potential economic impacts of the different projects on the Sonoma County and the Bay Area.

IMPLAN Input-Output Model

Regional and national input-output models have been used for years by economists as a tool to understand the extremely complex interactions among the various parts of an economy. The economic model used in this analysis, IMPLAN (“IMPact analysis for PLANning”), is a PC-based computer software package that automates the process of developing input-output models for regions within the United States. At the heart of the model is an input-output dollar flow table. For the specified region, the input-output table accounts for all of the dollar flows between the different sectors within the economy. Using this information, the IMPLAN software models the way income injected into one sector is then spent, and re-spent in other sectors of the economy, generating waves of economic activity, or so-called “economic multiplier” effects.

Regions studied using the IMPLAN model can be defined at various geographic levels to fit the particular analysis. The developers of the IMPLAN model maintain large databases of economic and trade data that are collected and published by the federal government, which they compile and format for use in the computer model. The data regarding input-output relationships between sectors used in the model for this analysis are from 2001 (latest currently available), and have been adjusted to provide results expressed in 2004 dollar figures. The data that IMPLAN uses are customized to reflect the specific, detailed economic characteristics of each individual county that is included within the specified regional study area. The IMPLAN model in turn is able to summarize the economic effects of a given economic “event” that is input into the model, expressing the impacts in terms of direct, indirect, and induced jobs, output, value added, and income by industry sector. The IMPLAN model is well respected as the industry standard for projecting economic impacts resulting from future “events.” In this study, the projected construction and operating budgets make up the “events” in the IMPLAN model.

Construction Phase

For the purposes of this analysis, construction expense estimates characterize the construction phase. These estimates become the basis for identifying the potential effects from the construction of the different scenarios. Station Casinos provided the construction phase estimates for the proposed and reduced intensity casinos, while market data and industry sources formed the basis defining the business park and No Action construction phases. Station Casinos estimated total construction costs for the proposed casino at \$450 million, and for the reduced intensity casino at \$433 million⁵. Additionally, market data suggest that construction of a

⁵ Based on their experience with other casinos, Station Casinos is expected to have the best information regarding the construction cost of constructing the proposed project. BAE believes this is a reasonable figure for the purposes of this analysis, assuming that the project will be constructed to a high quality and with a high level of amenities commensurate with the level necessary to attract the anticipated level of patronage. Their estimates are based on past casino construction experiences, and fine tuned to reflect the

500,000 square foot business park in Rohnert Park would cost approximately \$73 million. The construction of 498 residential units, and 151,000 square feet of retail space would cost approximately \$125.1 million. Additionally, Station Casinos estimates that the construction phase of the both the proposed casino and reduced intensity casino will generate 750 jobs over the entire construction period.

These cost and jobs estimates act as a proxy for output for construction phase for this analysis. As construction occurs at the site, construction expenditures equal the economic output generated in the construction sector in the local economy⁶. How each project allocates this money between businesses located in the county and elsewhere in the state depends on the extent to which resources are readily available in the county. IMPLAN models this relationship based on which sectors are prevalent in the county. It then estimates how much of the budget will stay in Sonoma County and how much will go elsewhere in the Bay Area. As Station Casinos provided output estimates and job estimates for the construction phase for each casino alternative, there was no need to utilize IMPLAN to generate the direct effects of the construction phase. Table 2 shows the direct construction effects for each project alternative, including the proposed casino.

Operating Phase

Once the development is open, its daily operations will create further economic effects for Sonoma County and the Bay Area. Station Casinos estimates that once open, the proposed casino will generate between \$455 million and \$582 million in revenues, with an average of \$518 million, while the reduced intensity casino will generate approximately \$388 million in revenues⁷. Some of these receipts may come at the expense of other local forms of entertainment, because a person might go to the casino for entertainment, rather than engaging in another form of entertainment. Thus, the person is substituting the casino experience for another entertainment experience. Since this substitution effect is likely to account for some of the casino receipts, these estimates of economic impacts on the local community represent an upper bound. For the business park alternative, market data for business parks suggest that there will be one worker per 250 square feet. IMPLAN estimates that this employment will generate approximate \$136.5 million in annual output. In addition, market data suggest that the retail space will require one worker per 500 square feet for the commercial space in the No Action alternative. According to IMPLAN, this employment, coupled with the projected household incomes of the new residents

location of the proposed casino. In addition, BAE reviewed third party construction estimates for the Cache Creek casino that show construction costs of approximately \$482 per square foot for a resort that opened in 2004. Although this is somewhat lower than the projected construction costs of \$590 per square foot that Station Casinos anticipates for the Graton Rancheria, BAE accepts the estimates from Station Casinos due to their vast experience in the casino construction industry and the general increase in construction costs since 2004.

⁶ IMPLAN treats construction expenditures as 100 percent local, as the physical building will be located in the local economy, and all workers will need to be in the local economy for the duration of the construction period. As these impacts are not ongoing, IMPLAN assumes that the induced impacts from labor spending its income will occur in the local economy.

⁷ Based on their experience with other casinos, Station Casinos is expected to have the best information regarding the potential sales of the proposed casino. BAE is utilizing this figure, which would represent a highly successful operation, for the purposes of this analysis.

will result in approximately \$75.4 million in annual output.⁸

Although the economic activity physically takes place in the local economy, not all of the revenues represent a direct economic impact to the local economy. Any portion of receipts that immediately leaves the area is not included in the direct economic impacts. For example, in the case of retail activity, only the retail mark-up remains to impact the local community, as most retail establishments represent national or regional chains. Appendix A provides a technical discussion of the IMPLAN model and how it determines local impacts.

Of the \$518 million in total casino revenues, IMPLAN estimates that approximately \$255 million will remain in both the Sonoma County and Bay Area economies as local impacts. Approximately \$188.8 million of the reduced intensity casino alternatives' revenues will remain in the local economies. For all casino alternatives, the impacts to the County match those of the region, as casino business is either likely to be local, or outside of the region. That is, there are no other Tribal headquarters located elsewhere in the Bay Area that would receive revenues from the casino alternatives. The management company, Station Casinos, is located in Nevada; thus, any revenues that leak outside of the County's economy in the direct round would also leak out of the regional economy. Likewise, for the No Action alternative, IMPLAN estimates that approximately \$19.4 million would represent a direct impact to the County and region.

The business park alternative represents different types of businesses than the casino alternatives. Thus, there would be differences in the amount of direct economic impacts at the County and regional levels. IMPLAN estimates that of the total \$136.5 million in operations, the business park alternative would result in \$48.5 million in direct impacts to the County, and \$57.2 million in regional impacts. The difference accounts for businesses that may be headquartered in other portions of the region, but have a satellite office in the County.

Substitution. The magnitude of the substitution effect can be expected to vary greatly by specific location. That is, how much of the casino's revenue comes at the expense of other business establishments in the area depends on how many and what type of other establishments are within the same market area as the casino, disposable income levels of local residents and their spending habits, as well as other economic and psychological factors affecting the consumption decisions of local residents. To the extent that the casino acts as a destination location, substitution effects become more diffuse, as the casino is drawing patrons from a widespread area. Quantifying the substitution effects of the casino would require knowledge of how residents spend their entertainment dollars, how patrons rank their preferences for different types of entertainment, and the distribution of where casino patrons originate (i.e. local residents, day-trippers, etc.). Although it is not possible to quantify the substitution effects of the casino on existing businesses, this analysis provides a qualitative analysis of the potential magnitude of the substitution effect based on four types of potential visitors: tourists, local residents who would otherwise spend their money on local entertainment, local residents who would otherwise leave the County for entertainment, and local residents who would otherwise save their money.

⁸ Station Casinos provided a range of potential sales for the full-size casino, which allowed the analysis to analyze a range of impacts from the proposed casino alternative. However, no ranges were available for the other alternatives; thus, there is only one set of impact estimates for the non-full size casino alternatives.

Tourists. Tourists are defined as those visitors who would not otherwise come to the area for entertainment. As they would not otherwise spend entertainment dollars in the County, 100 percent of casino receipts attributable to this group represent a net addition of dollars to the County. While it is not possible to estimate the percentage of casino patrons that would be tourists, anecdotal evidence from other Northern California Indian casinos suggest that a significant portion of patrons would fall into this category based on the number of tour buses that bring patrons to other casinos, the fact that the proposed casino and its alternatives include hotel space, and the fact that the hotel would be located in Sonoma County, a known tourist destination.

Residents who would otherwise spend their money on local entertainment. This group includes local residents who would forego other local entertainment opportunities in order to frequent the casino for dining and entertainment purposes. While a significant portion of local residents may initially substitute casino patronage instead of going to other local dining and entertainment opportunities in order to experience the casino, after the first few months of operations, the casino should only impact other local establishments as much as another new restaurant or entertainment venue would impact existing establishments because residents tend to value a variety of local entertainment uses. In other words, it is unlikely that most residents simply interested in new dining or entertainment opportunities would make the casino their preferred destination for these activities but rather would patronize the casino as one of many available dining and entertainment options. Once local residents experience the casino and return to normal spending patterns, the long-term substitution effects of the casino should be smaller than in the initial year, but will continue to account for some expenditures that other existing businesses could have otherwise captured. Thus, not all of the casino expenditures from local residents who would otherwise purchase local entertainment represent new economic benefits to the County. For a detailed discussion of the impacts of Graton Rancheria on River Rock casino, please see the "Operating Period Market Impacts" section of this Socio-economic Impact Analysis.

Residents who would otherwise leave the County for entertainment. This group includes County residents who would otherwise leave the County for entertainment. With Marin and San Francisco Counties easily accessible, some Sonoma County residents may currently leave the County for entertainment purposes. In addition, some local residents may travel outside of the County or Bay Area to attend casinos elsewhere in Northern California. To the extent that some of these residents may decide to remain in the County to patronize the casino, their contributions to casino revenues represent benefits to the local economy.

Residents who would otherwise save their money. This group includes County residents who would spend some of their savings to visit the casino. As this group would not forego other entertainment opportunities in the County, their impacts would represent new economic impacts to the County. While it is not possible to determine what portion of casino patrons fall into this category, it is likely that once this group initially experiences the casino, they will likely reduce some of their casino expenditures and return towards their previous spending patterns, saving less than before the opening of the casino, but more than when they were first exploring the casino.

Based on the types of visitors likely to visit the casino, it is feasible that some of the casino's

receipts will come at the expense of other local venues, and therefore would not represent new benefits to the County. However, in the first year, the new economic benefits to the County will likely be smaller than over the long-term. As explained above, casino patron expenditures will come from a number of different sources, including tourists, residents who would otherwise spend their entertainment dollars elsewhere in the County, residents who would otherwise leave the County for entertainment, and residents who would otherwise save their money. Given the above analysis, there is likely to be some level of substitution from other local entertainment venues; however, as it is not possible to reliably quantify the substitution effects, this analysis does not arbitrarily reduce the economic impacts from the proposed casino and other alternatives to account for substitution effects.

In examining the substitution effects, BAE reviewed a 2000 Harvard study⁹ that determined the substitution impacts of a new casino in a rural setting would be greater than for a new casino in an urban setting. The study shows that in the extreme case of opening a casino in a rural setting, where there is little tourism base, there is evidence that on average, the opening of a casino will have an impact on earnings of other local dining and recreational establishments. According to the 2000 Harvard study analyzing the socioeconomic impacts of American Indian gaming, on average, the opening of an Indian casino leads to a nine percent decrease in the earnings of restaurants and bars¹⁰, a 17 percent increase in recreation establishments, no significant change in the retail sector overall, but a ten percent increase in the general merchandise sector. It is important to note that the casinos analyzed in the study are located in rural settings, and thus, represent extreme levels of substitution related to opening a casino. Although the Lakeville alternative (Alternative F) is the most rural of all of the proposed alternatives, its proximity to Petaluma and Novato, two cities that have a number of dining and entertainment options, indicate that the substitution effects projected in the Harvard study are higher than the actual substitution effects that would occur for the Lakeville alternative. Thus, any substitution impacts at the Wilfred, Stony Point, or Lakeville sites will be diffuse because there are a large number of existing businesses that already operate in a competitive environment.¹¹ As the casino and casino hotel will draw non-residents to the area, the associated increase in new visitor demand for offsite entertainment venues, restaurants, and bars can be expected to make up for some area residents choosing to eat within the proposed casino hotel, rather than at existing eateries.

IMPLAN Analysis of Direct Operating Impacts. Since there is a range for the potential sales that either casino scenario would generate, this analysis examines the impacts of the high sales scenario and the low sales scenario for each alternative, and reports the average. In this analysis, potential revenues along with the IMPLAN (“IMpact analysis for PLANning”) model, assess the

⁹ Taylor, Jonathan B., Matthew B. Krepps, and Patrick Wang. “The National Evidence on the Socioeconomic Impacts of American Indian Gaming on Non-Indian Communities.” April, 2000.

¹⁰ According to industry standards information from BizStats.com, this translates into a change in profits of less than one cent per dollar of earnings.

¹¹ As the reduced intensity casino alternatives would devote less square footage to restaurant and entertainment space than the full-scale casino alternatives, the reduced intensity casino alternatives provide fewer dining and entertainment options. Thus, under the reduced intensity casino alternatives, residents have fewer substitution possibilities than under the full-scale casino alternatives, which translates into smaller substitution impacts.

annual economic impacts each scenario's operating phase. Below are the figures for the preliminary revenue forecasts, and staffing requirements the mid-range revenue scenario.

Average Scenario	Proposed Casino	Reduced Intensity Casino	Business Park	No Action
Direct Impacts	\$254,600,000	\$188,800,000	\$48,500,000 ¹²	\$19,400,000
Staffing Requirements	2,400	2,100	2,000	300

Graton Rancheria will directly employ between 2,200 and 2,600 workers to support its daily operations, with an average of 2,400 workers. These employment figures represent new jobs within the local economy, provided that once the casino is operating at a "stable" level the impacts of the casino on other entertainment and dining venues are diffuse enough that there is no net loss of employment in the rest of the local economy. The preceding "substitution" discussion, as well as the "competitive impacts" discussion that follows in this *Socio-Economic Impact Analysis*, both indicate that although there may be some long-term substitution, the majority of these jobs will represent new employment in the local economy. For a detailed discussion of the direct impacts in the IMPLAN model, please see Appendix A of this *Socio-Economic Impact Analysis*. Table 3 shows the operating phase characteristics for the proposed casino and alternative scenarios.

¹² The direct impacts for the business park alternative reflect the impacts to Sonoma County. The impacts to the region are approximately \$57.2 million. This is the only alternative where IMPLAN estimates significantly different impacts to the region than the County.

Table 2: Direct Construction Impacts

Direct Construction Impacts (a)	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G	Alternative H
	Proposed Action	First Alternate On-Site Location	Second Alternate On-Site Location	Reduced Intensity	Business Park	Alternate Off-Site Location	No Action	Reduced Intensity
Number of Employees (b)	750	750	750	750	90	750	104	750
Commercial Construction Costs	\$450,000,000	\$450,000,000	\$450,000,000	\$433,000,000	\$54,200,000	\$450,000,000	\$40,909,000	\$433,000,000
Single Family Unit Construction Costs							\$64,733,000	
Multifamily Construction Costs							\$19,426,000	
Estimated Construction Period	27 months	27 months	27 months	24 months	20 months	27 months	24 months	24 months

Notes:

- (a) The direct impacts are the same for both Sonoma County and the Bay Area.
- (b) Direct employment figures come from Casino estimates rather than IMPLAN, for all alternatives except Alternative G.
- (c) Estimates for employees assume same ratio of costs to employees as casino. Assumes construction costs of \$155 per square foot.

Sources: AES, 2006; IMPLAN, 2006; Bay Area Economics, 2006

Table 3. Direct Annual Operating Impacts

Operating Characteristics (a)	Alternative A		Alternative B		Alternative C		Alternative D		Alternative E		Alternative F		Alternative G		Alternative H	
	Proposed Action	First Alternate On-Site Location	Second Alternate On-Site Location	Reduced Intensity	Business Park	Location	No Action	Reduced Intensity	Location	No Action	Reduced Intensity	No Action	Reduced Intensity	No Action	Reduced Intensity	No Action
Number of Employees (b)	2,200 - 2,600	2,200 - 2,600	2,200 - 2,600	2,100	2,000	2,200 - 2,600	302 (c)	2,100	2,000	2,200 - 2,600	302 (c)	2,100	2,000	2,200 - 2,600	302 (c)	2,100
Output																
Casino, Including Retail	\$380M - \$500M	\$380M - \$500M	\$380M - \$500M	\$340M	\$0	\$380M - \$500M	\$0	\$340M	\$0	\$380M - \$500M	\$0	\$340M	\$0	\$380M - \$500M	\$0	\$340M
Food and Beverage	\$43M - \$49M	\$43M - \$49M	\$43M - \$49M	\$36M	\$0	\$43M - \$49M	\$0	\$36M	\$0	\$43M - \$49M	\$0	\$36M	\$0	\$43M - \$49M	\$0	\$36M
Entertainment	\$4.5M	\$4.5M	\$4.5M	\$0	\$0	\$4.5M	\$0	\$0	\$0	\$4.5M	\$0	\$0	\$0	\$4.5M	\$0	\$0
Hotel	\$19M - \$20M	\$19M - \$20M	\$19M - \$20M	\$5M	\$0	\$19M - \$20M	\$0	\$5M	\$0	\$19M - \$20M	\$0	\$5M	\$0	\$19M - \$20M	\$0	\$5M
Other	\$8M	\$8M	\$8M	\$7M	\$0	\$8M	\$0	\$7M	\$0	\$8M	\$0	\$7M	\$0	\$8M	\$0	\$7M
Light Industrial Businesses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commercial Businesses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Residents, For Sale Units																
New Residents, Rental Units																
Total Sales (Inputs)	\$454.5M - \$581.5M	\$454.5M - \$581.5M	\$454.5M - \$581.5M	\$388M	\$136,500,000	\$454.5M - \$581.5M	\$75,410,254	\$388M	\$136,500,000	\$454.5M - \$581.5M	\$75,410,254	\$388M	\$136,500,000	\$454.5M - \$581.5M	\$75,410,254	\$388M
Direct Local Operating Impacts																
Sonoma County	\$224.9M - \$284.2M	\$224.9M - \$284.2M	\$224.9M - \$284.2M	\$188,780,000	\$48,500,000	\$224.9M - \$284.2M	\$19,420,000	\$188,780,000	\$48,500,000	\$224.9M - \$284.2M	\$19,420,000	\$188,780,000	\$48,500,000	\$224.9M - \$284.2M	\$19,420,000	\$188,780,000
Bay Area	\$224.9M - \$284.2M	\$224.9M - \$284.2M	\$224.9M - \$284.2M	\$188,810,000	\$57,150,000	\$224.9M - \$284.2M	\$19,420,000	\$188,810,000	\$57,150,000	\$224.9M - \$284.2M	\$19,420,000	\$188,810,000	\$57,150,000	\$224.9M - \$284.2M	\$19,420,000	\$188,810,000

Notes:

- (a) The direct impacts are the same for both Sonoma County and the Bay Area.
- (b) Direct employment figures come from Casino estimates rather than IMPLAN.
- (c) Based on 500 square feet per retail employee.
- (d) Based on average annual sales per square foot \$313.67 in Neighborhood shopping centers in the West.
- (e) Based on 1999 household income distribution of Rohnert Park homeowners.
- (f) Based on 1999 household income distribution of Rohnert Park renter households.
- (g) Differential between regional and County impacts are larger for the business park because a significant amount of business associated with the business park would likely occur within the region, but outside of the County.

Sources: AES, 2006; IMPLAN, 2006; US Dollars and Cents of Shopping Centers, 2004; US Census, 2000; Bay Area Economics, 2006

Indirect and Induced Impacts of the Casino Facility on the Local Economy

The direct outputs of the construction and operating phases act as inputs to the IMPLAN computerized input-output model to generate the indirect and induced impacts of the proposed Casino on Sonoma County and the Bay Area. The indirect impacts represent the inter-industry trade which the casino engages in with other businesses; whereas the induced impacts represent the economic activity spawned by the household trade that occurs when casino employees act as consumers. The IMPLAN model generates estimates of these impacts through a series of relationships internal to the model using county-level average wages and prices. Appendix A of this *Socio-Economic Impact Analysis* provides a more detailed discussion of the indirect and induced impacts of the IMPLAN model.

Construction Phase

Using the construction budget as a proxy for output along with the IMPLAN model¹³, BAE generated the indirect and induced impacts of construction of the proposed project and its alternatives on Sonoma County and the Bay Area. The city of Rohnert Park will benefit from the construction phase of the casino insofar as the construction workers are local and spend their income in the area. Otherwise, establishments where out-of-town based workers can eat and sleep, and local providers of cement, wood, and other building materials and services will experience the largest benefit from the construction phase. The following tables show the indirect and induced impacts from the full casino's construction phase on the county and region.

Indirect Impact	Sonoma County	Bay Area
Gross Output	\$102,510,000	\$122,920,000
Value Added	\$67,000,000	\$74,650,000
Employment ¹⁴	492	538

Induced Impact	Sonoma County¹⁵	Bay Area
Gross Output	\$214,880,000	\$220,680,000
Value Added	\$128,850,000	\$128,850,000
Employment ¹⁶	985	985

The figures for gross output and value added are dependent on the cost of construction equaling the direct impacts of construction. To the extent that some of the construction budget is spent

¹³ BAE used the "Other New Construction" IMPLAN sector to represent the construction phase for Graton Rancheria.

¹⁴ Employment figures equal number of job years reported by IMPLAN (1,100 and 1,200), divided by years of construction (2.25).

¹⁵ Induced employment and value added figures are reported as equal for County and region. The reason for this is that IMPLAN reports these impacts as higher in the County than region because of variations in the average wage and productivity measures between the two areas.

¹⁶ Employment figures equal number of job years reported by IMPLAN (2,210), divided by years of construction (2.25).

outside of Sonoma County, these impacts will be overstated. Appendix A provides a more detailed discussion of the indirect and induced impacts of the IMPLAN model Table 4 shows the indirect and induced impacts of the construction phase of the proposed casino and alternative scenarios on Sonoma County and the Bay Area.

Operating Phase

Using the operating budget as a proxy for output, the IMPLAN model¹⁷ generated estimates of the indirect and induced impacts of operation of the proposed project on Sonoma County and the Bay Area region. Due to the potential for substitution, these impacts represent an upper bound on the expected economic impacts for the area. The following tables show the indirect and induced impacts from the operating phase for the average receipts estimate.

Average Scenario:

Indirect Impact	Sonoma County	Bay Area
Gross Output	\$65,900,000	\$77,100,000
Value Added	\$40,200,000	\$46,000,000
Employment	730	820

Induced Impact	Sonoma County¹⁸	Bay Area
Gross Output	\$71,400,000	\$74,500,000
Value Added	\$43,500,000	\$43,500,000
Employment	750	750

The output and total value added impact figures are based on the estimated casino operating budget representing the “event” that was input into the IMPLAN model. Rohnert Park and other nearby jurisdictions will benefit from the proposed casino’s indirect and induced impacts insofar as local businesses can provide services and goods that the casino will require as part of its daily operations and that the households supported by this new economic activity will demand. Table 5 shows the indirect and induced impacts of the operating phase of the proposed casino and alternative scenarios on Sonoma County and the Bay Area.

¹⁷ For the purposes of this study, the following IMPLAN sectors represent Graton Rancheria’s operating period: Other Amusement – Gambling and Recreation, Hotels and Motels – Including Casino Hotels, and Food Services and Drinking Places.

¹⁸ Induced employment and value added figures are reported as equal for County and region. The reason for this is that IMPLAN reports these impacts as higher in the County than region because of variations in the average wage and productivity measures between the two areas.

Table 4: Indirect and Induced Construction Impacts

Area/Construction Impacts	Alternative A Proposed Action	Alternative B First Alternate On-Site Location	Alternative C Second Alternate On-Site Location	Alternative D Reduced Intensity	Alternative E Business Park	Alternative F Alternate Off-Site Location	Alternative G No Action (d)	Alternative H Reduced Intensity
Sonoma County								
Indirect Impacts								
Number of Employees (a)	492	492	492	532	111	492	213	532
Output	\$102,510,000	\$102,510,000	\$102,510,000	\$98,630,000	\$15,980,000	\$102,510,000	\$35,930,000	\$98,630,000
Value Added	\$67,000,000	\$67,000,000	\$67,000,000	\$64,470,000	\$10,450,000	\$67,000,000	\$22,940,000	\$64,470,000
Induced Impacts								
Number of Employees	985	985	985	1,067	139	985	220	1,067
Output	\$214,880,000	\$214,880,000	\$214,880,000	\$206,760,000	\$21,690,000	\$214,880,000	\$41,260,000	\$206,760,000
Value Added	\$128,850,000	\$128,850,000	\$128,850,000	\$123,980,000	\$13,260,000	\$128,850,000	\$25,230,000	\$123,980,000
Indirect and Induced Impacts								
Number of Employees	1,476	1,476	1,476	1,599	250	1,476	433	1,599
Output	\$317,390,000	\$317,390,000	\$317,390,000	\$305,390,000	\$37,670,000	\$317,390,000	\$77,190,000	\$305,390,000
Value Added	\$195,850,000	\$195,850,000	\$195,850,000	\$188,450,000	\$23,710,000	\$195,850,000	\$48,170,000	\$188,450,000
Bay Area (b)								
Indirect Impacts (c)								
Number of Employees	538	538	538	583	51	538	220	583
Output	\$122,920,000	\$122,920,000	\$122,920,000	\$118,270,000	\$7,220,000	\$122,920,000	\$41,840,000	\$118,270,000
Value Added	\$74,650,000	\$74,650,000	\$74,650,000	\$71,830,000	\$4,830,000	\$74,650,000	\$25,520,000	\$71,830,000
Induced Impacts (c)								
Number of Employees	985	985	985	1,067	139	985	215	1,067
Output	\$220,680,000	\$220,680,000	\$220,680,000	\$220,680,000	\$9,670,000	\$220,680,000	\$42,770,000	\$220,680,000
Value Added	\$128,850,000	\$128,850,000	\$128,850,000	\$123,980,000	\$13,260,000	\$128,850,000	\$25,230,000	\$123,980,000
Indirect and Induced Impacts								
Number of Employees	1,523	1,523	1,523	1,650	190	1,523	435	1,650
Output	\$343,600,000	\$343,600,000	\$343,600,000	\$338,950,000	\$16,890,000	\$343,600,000	\$84,810,000	\$338,950,000
Value Added	\$203,500,000	\$203,500,000	\$203,500,000	\$195,810,000	\$18,090,000	\$203,500,000	\$50,750,000	\$195,810,000
Estimated Construction Period	27 months	27 months	27 months	24 months	20 months	27 months	24 months	24 months

Notes:

- (a) Number of employees equals the total jobs years that IMPLAN reports, divided by the estimated construction period (in years).
- (b) Nine county Bay Area includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties.
- (c) Induced employment and value added impacts are reported as being the same for the County and region. The reason for this is that IMPLAN reports these impacts as higher in the County than the region because of variations in the average wage and productivity measures between the two areas.
- (d) Assumes a six year construction period for the purposes of estimating employment impacts.

Sources: AES, 2006; IMPLAN, 2006; Bay Area Economics, 2006

Table 5: Indirect and Induced Operating Impacts

Area/Construction Impacts	Alternative A Proposed Action	Alternative B First Alternate On-Site Location	Alternative C Second Alternate On-Site Location	Alternative D Reduced Intensity	Alternative E Business Park	Alternative F Alternate Off-Site Location	Alternative G No Action	Alternative H Reduced Intensity
Sonoma County								
Indirect Impacts								
Number of Employees	646 - 821	646 - 821	646 - 821	550	68	646 - 821	10	550
Output	\$58.1M - \$73.7M	\$58.1M - \$73.7M	\$58.1M - \$73.7M	\$49,480,000	\$5,560,000	\$58.1M - \$73.7M	\$1,320,000	\$49,480,000
Value Added	\$35.4M - \$45.0M	\$35.4M - \$45.0M	\$35.4M - \$45.0M	\$30,150,000	\$3,770,000	\$35.4M - \$45.0M	\$920,000	\$30,150,000
Induced Impacts								
Number of Employees	662 - 834	662 - 834	662 - 834	565	86	662 - 834	67	565
Output	\$63.2M - \$79.6M	\$63.2M - \$79.6M	\$63.2M - \$79.6M	\$52,930,000	\$8,000,000	\$63.2M - \$79.6M	\$6,260,000	\$52,930,000
Value Added	\$38.5M - \$48.5M	\$38.5M - \$48.5M	\$38.5M - \$48.5M	\$32,370,000	\$4,890,000	\$38.5M - \$48.5M	\$3,830,000	\$32,370,000
Indirect and Induced Impacts								
Number of Employees	1,308 - 1,655	1,308 - 1,655	1,308 - 1,655	1,115	153	1,308 - 1,655	77	1,115
Output	\$121.3M - \$153.3M	\$121.3M - \$153.3M	\$121.3M - \$153.3M	\$102,410,000	\$13,560,000	\$121.3M - \$153.3M	\$7,580,000	\$102,410,000
Value Added	\$73.9M - \$93.5M	\$73.9M - \$93.5M	\$73.9M - \$93.5M	\$62,520,000	\$8,660,000	\$73.9M - \$93.5M	\$4,750,000	\$62,520,000
Bay Area (a)								
Indirect Impacts								
Number of Employees	718 - 913	718 - 913	718 - 913	612	86	718 - 913	11	612
Output	\$68.0M - \$86.1M	\$68.0M - \$86.1M	\$68.0M - \$86.1M	\$57,850,000	\$7,220,000	\$68.0M - \$86.1M	\$1,390,000	\$57,850,000
Value Added	\$40.5M - \$51.4M	\$40.5M - \$51.4M	\$40.5M - \$51.4M	\$34,480,000	\$4,630,000	\$40.5M - \$51.4M	\$960,000	\$34,480,000
Induced Impacts								
Number of Employees	662 - 834	662 - 834	662 - 834	565	97	662 - 834	66 (b)	565
Output	\$65.9M - \$83.1M	\$65.9M - \$83.1M	\$65.9M - \$83.1M	\$55,250,000	\$9,670,000	\$65.9M - \$83.1M	\$6,530,000	\$55,250,000
Value Added	\$38.5M - \$48.5M	\$38.5M - \$48.5M	\$38.5M - \$48.5M	\$32,370,000	\$5,650,000	\$38.5M - \$48.5M	\$3,810,000 (b)	\$32,370,000
Indirect and Induced Impacts								
Number of Employees	1,380 - 1,747	1,380 - 1,747	1,380 - 1,747	1,178	183	1,380 - 1,747	76	1,178
Output	\$133.9M - \$169.2M	\$133.9M - \$169.2M	\$133.9M - \$169.2M	\$113,100,000	\$16,890,000	\$133.9M - \$169.2M	\$7,920,000	\$113,100,000
Value Added	\$79.0M - \$99.9M	\$79.0M - \$99.9M	\$79.0M - \$99.9M	\$66,850,000	\$10,480,000	\$79.0M - \$99.9M	\$4,770,000	\$66,850,000

Notes:

(a) Nine county Bay Area includes Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties.

(b) For the casino alternatives, induced employment and value added impacts are reported as being the same for the County and region. The reason for this is that IMPLAN reports these impacts as higher in the County than the region because of variations in the average wage and productivity measures between the two areas.

Sources: AES, 2006; IMPLAN, 2006; Bay Area Economics, 2006

Growth Inducing Impacts of Operating Phase

During the operating period, the casino will require between 2,200 and 2,600 staff. This will potentially result in additional housing and commercial demand from new casino employees. This portion of the study examines the additional housing and offsite commercial demand generated by the proposed development, and each alternative. Additionally, the analysis will interpret the results relative to the City's desired land use allocations and jobs/housing balance.

Housing Demand

For the alternatives at the proposed project site, the number of new casino employees who choose to live in Rohnert Park will determine the new housing demand attributable to this project. The 2000 Census provides Journey to Work data, which estimates the percentage of Rohnert Park employees who live in Rohnert Park, as well as other locations within the Bay Area. As Table 6 illustrates, according to the Census data, approximately 31 percent of all Rohnert Park employees live within Rohnert Park, and 26 percent of employees live within Santa Rosa, with the remainder living elsewhere in the Bay Area. This implies that 31 percent of new casino employees will seek housing in Rohnert Park, and 26 percent of new employees will demand housing in Santa Rosa. The other significant-sized community located near the proposed site is Petaluma, approximately 11 miles away. Approximately 5.0 percent of the workers in Rohnert Park commute from Petaluma, meaning that Petaluma would feel a relatively insignificant impact from the proposed project compared to Santa Rosa and Rohnert Park.

Although the Casino will be creating new jobs, before new residents move into the area, unemployed workers, and some people who were previously in the labor force will take some of the casino jobs. This analysis assumes that the local area will be able to return to its historic high employment level with local workers before new workers will move into the area for casino jobs. That is, once the casino opens, currently unemployed local workers will find employment at the casino, followed by those workers who are not currently in the labor force¹⁹, but who might be compelled to reenter the labor force due to the availability of new local jobs. This follows Thunder Valley casino practices, where the casino hired and trained local workers. Casino staff members, particularly dealers, follow strict house rules regarding their methods of play as dealers. Thus, employees do not need to be pre-skilled at playing cards in order to obtain employment. The casino will likely hire trainable workers, and then train them to work in the casino. In order to attract and retain quality workers, the casino will need to provide a compensation package that is competitive with other positions of a similar skill level within the local area. Given the training that the casino will need to provide to its staff, and that casino staff will potentially handle large quantities of money, the analysis assumes that casino compensation packages will at least be competitive within the local region to attract quality workers.

Daycare Services. Although the proposed casino will not result in additional housing demand, the casino may generate additional demand for daycare services in the local community as some

¹⁹ There are some workers who gave up searching for work, but would like to work. Those people are not counted in the current labor force. In addition, there are other people who are not currently employed or looking for work who will want to work at the casino, and therefore, will enter the labor force.

casino workers who were the primary childcare providers in their own families reenter the labor force. According to the Growth Inducing Impacts section of this *Socio-Economic Impacts Analysis* report, the future casino workers would come from within the County, with some workers reentering the labor force. Presumably, each worker who reenters the labor force will do so provided that the benefits of working (wages and non-pecuniary benefits) outweigh the costs, including any increased need for childcare. That is, casino workers will take childcare availability into account when making the decision to reenter the labor force.

As of 2004 there was a deficit in the number of childcare slots available to County residents. According to the November 2004 *Sonoma County Child Care Needs Assessment*, there are between 6,000 and 40,000 unmet slots demanded for childcare in the County.²⁰ The magnitude of the deficit varies depending on how demand is calculated, where the lower demand estimate comes from statewide childcare utilization rates, and the higher estimate of demand comes from counting the number of children in households that either have two working parents, or have a single-parent who works.²¹ As the higher demand estimate does not account for relatives or neighbors providing daycare services and the lower demand is based on actual daycare utilization rates, the lower estimate is likely closer to the actual demand for childcare. Applying the lower demand estimate to the number of children in the County shows a childcare demand rate of 26 percent.²² That is, County residents require childcare services for 26 percent of all children. According to the census, in 2000 there were 0.25 children under the age of 14 per adult resident. Assuming that the ratio of children to adults remains constant, 2,400 workers would require approximately 158 childcare slots.²³ Given that there are approximately 16,000 childcare slots in the County, and demand for 22,000 childcare slots, the increased demand for childcare accounts for one percent of supply and less than one percent of demand.²⁴ Thus, the impacts to childcare will not be significant.²⁵ However, it should be noted that according to the report, only one in 20 providers offer weekend care, and three percent offer care after 7:00 pm, which could potentially burden casino employees who need childcare.²⁶ While this analysis assumes that potential casino employees internalize daycare options in making the decision to work at the casino, given the lack of after-hours daycare availability within the County, the casino could attract better quality workers if it offered after-hours daycare for staff members.

Proposed Casino at Wilfred and Stony Point Sites. In 2003, Sonoma County had a 70 percent labor force participation (LFP) rate. That is, 70 percent of the population who were over the age of 16 was either employed, or actively looking for work (unemployed). During the same time, Rohnert Park had an 80 percent LFP rate. Historical data shows that the maximum LFP rates for

²⁰ Sonoma County Child Care Needs Assessment, 2004.

²¹ Ibid.

²² Ibid.

²³ Number of required childcare slots equals 2,400 workers times 0.25 children per adult resident, times 26 percent that will require childcare.

²⁴ Sonoma County Child Care Needs Assessment, 2004.

²⁵ Given that the reduced intensity casino alternatives result in fewer employees (2,100) than the full-scale casino alternatives (2,400), the impacts to childcare will be less significant under the reduced intensity alternatives.

²⁶ Sonoma County Child Care Needs Assessment, 2004.

Sonoma County occurred in 2001 and 2002, with a 72 percent LFP rate; Rohnert Park's maximum LFP rate was 82 percent in 2002. Likewise, historical data shows the historic minimum unemployment rates for the areas occurring in 2000, with a 2.6 percent unemployment rate in Sonoma County, and a 2.6 percent unemployment rate in Rohnert Park. Table 7 shows the labor force participation rates, and unemployment rates for Sonoma County, Rohnert Park, Santa Rosa, Petaluma, Marin County, Novato, and the San Francisco MSA, as well as the potential labor force participation rates and unemployment rates for those areas. This analysis then applies the historical high LFP rates, and low unemployment rates, to the current population in Rohnert Park, Sonoma County, and other areas that would potentially supply workers to generate the potential number of workers for each area. The analysis then compares the maximum potential number of workers for each area to the number of currently employed workers to determine the latent labor supply for each area. Based on commute patterns and employment estimates for the proposed project, this analysis finds that there are enough current residents who are either unemployed or out of the labor force in each area to fill all new direct jobs associated with the proposed casino. Thus, the City and County are not expected to increase in population or number of households as a result of the casino.²⁷ Table 8 shows the net job absorption figures for the proposed casino in Rohnert Park, Santa Rose, Petaluma, Sonoma County, Novato, and Marin County.

Since the proposed casino will bring the highest potential number of jobs of all of the different alternatives involving the site adjacent to Rohnert Park, it follows that the existing labor pool could absorb the new jobs in each of those other project alternatives as well, including the reduced intensity casino alternatives, which would employ fewer workers.

Proposed Casino at Lakeville Site. Movement of the project from the Wilfred Site to the Lakeville Site would not likely create substantially different impacts in terms of growth inducing impacts, due to the nature of the worker commute flows in the Sonoma and Marin County area. Developing the project on the Lakeville Site would move the project closer to Marin County, approximately eight miles from Novato.

Unlike the Wilfred Site, which is immediately adjacent to Rohnert Park, and for which we are able to obtain data regarding worker commute patterns, the Lakeville Site is located in a sparsely developed area where agricultural employment would be more typical versus the type of employment associated with a casino. Thus, existing commute patterns from the Lakeville Site to other jurisdictions would likely not be indicative of what we could expect if the project were constructed at the Lakeville Site. In place of actual commute data regarding the place of residence for people currently employed at the Lakeville Site, this analysis uses data on the residence location of people employed in Novato as an indicator. Novato is the closest city of significant size to the Lakeville Site and we can expect that the commute behavior of people who would be employed at the Lakeville Site would be similar to those who are currently employed in Novato, in terms of choice of residence location. These data are shown in Table 6.

²⁷ The 2003 Memorandum of Understanding (MOU) between the City and Tribe allows for annual contributions to for workforce housing and neighborhood upgrades that would be sufficient to mitigate any *potential* impacts. This does not mean that there will necessarily be new residential growth from casino workers.

For the Lakeville Site alternative, the analysis applies the historic high labor force participation rate data and historic low unemployment data for Novato and Marin County to estimate the available labor force to fill jobs at the casino and finds that there is sufficient latent labor supply within these communities to fill the new casino jobs. Thus, there would not be any additional housing demand from the casino workers that would be employed at the Lakeville Site. Table 7 shows the historic LFP rates, and unemployment rates for Novato and Marin County, and Table 8 shows the potential worker absorption.

Commercial Demand

Although the proposed project will not require any increase in the number of local residents in order to fill its available jobs, there may be some slight increase in commercial space demand. According to the California State Board of Equalization, Rohnert Park residents spent approximately \$11,000 per capita in taxable sales in 2002²⁸. However, if the LFP increases from its current level to its peak, and the unemployment rate decreases, certain residents may have additional disposable income. Then, the amount of taxable sales spent per capita should increase slightly for the area, making the local retail market stronger. It is unlikely that there will be increased demand for a new restaurant or hotel, as the casino includes both of these establishments.²⁹ While it is possible that casino traffic would lead to additional service station demand, an additional service station is unlikely as there are currently two service stations at the Highway 101 off-ramp that will serve the casino. It is possible that the increased local expenditures due to increased local trade area personal income could be absorbed in existing retail facilities, which would benefit from increases in sales volume. Otherwise, these additional consumer expenditures could create demand for additional commercial space within the local retail marketplace; however, any additional commercial demand would be diffuse based on where casino employees reside. According to the Harvard study that analyzed the impacts of a rural casino on other commercial developments, there was no impact on the retail market. In a more urban setting, where the casino would not be a major employer for the greater area, the impacts would be even smaller. Thus, it would be purely speculative to quantify the amount of commercial space demanded, but this should be a marginal effect relative to the total existing demand.

Indirect and induced economic impacts within the local economy spawned by the new casino activity may also create growth inducing impacts; however, these impacts are expected to be diffuse and distributed among many different businesses in many different sectors located throughout Sonoma County and the greater Bay Area.³⁰ For this reason, it would be speculative

²⁸ State Board of Equalization data is lagged approximately one year, so 2002 is the most recent annual figure provided.

²⁹ This analysis does not suggest that there will be no commercial expansion along Wilfred Ave. The Wilfred-Dowdell Specific Plan includes 27.44 acre site proposed for commercial development. This analysis suggests that since the casino will hire local employees, and the casino will include hotel and restaurant amenities, employees and casino patrons will not demand a significant amount of new retail to induce development pressures in areas around the site.

³⁰ The reduced intensity casino alternatives would employ fewer workers than the full-scale casino alternatives, and would result in fewer casino patrons visiting the area. Thus, commercial demand under

to attempt to predict where and how these impacts will be felt.

Jobs/Housing Balance

As the casino will not increase either the number of houses required to satisfy demand or commercial retail space within the City, the casino will not directly impact the jobs/housing balance within Rohnert Park. Currently, there are 1.46 jobs per housing unit in Rohnert Park³¹. This is higher than the stipulated jobs housing balance designated in the General Plan. Section 2.3 of the Rohnert Park General Plan states that there should be 1.04 jobs per housing unit, but that due to economic development in the City, the new acceptable ratio will be 1.22 jobs per housing unit.

the reduced intensity alternatives would be even more diffuse than under the full-scale casino alternatives.

³¹ Based on 2004 State Department of Finance housing unit data, and 2004 ABAG employment data.

Table 6: Residence Location of Workers

Place of Residence for Workers Employed at Workplace Adjacent to Rohnert Park

Place of Residence	County of Residence	Total Existing Workers	Pct. Of Total
Novato	Marin	100	0.67%
Remainder of Marin County	Marin	150	1.00%
<i>Subtotal: Marin County</i>	<i>Marin</i>	<i>250</i>	<i>1.66%</i>
Cotati	Sonoma	310	2.06%
Petaluma	Sonoma	825	5.49%
Rohnert Park	Sonoma	5,095	33.91%
Santa Rosa	Sonoma	4,240	28.22%
Sebastopol	Sonoma	215	1.43%
Remainder of Sonoma County	Sonoma	3,255	21.67%
<i>Subtotal: Sonoma County</i>	<i>Sonoma</i>	<i>13,940</i>	<i>92.79%</i>
<i>All Other Locations</i>	<i>N/A</i>	<i>833</i>	<i>5.54%</i>
Total		15,023	100.00%

Place of Residence for Workers Employed at Lakeville Site Workplace (a)

Place of Residence	County of Residence	Total Existing Workers	Pct. Of Total
Novato	Marin	8,240	35.32%
Remainder of Marin County	Marin	4,735	20.30%
<i>Subtotal: Marin County</i>	<i>Marin</i>	<i>12,975</i>	<i>55.62%</i>
Cotati	Sonoma	210	0.90%
Petaluma	Sonoma	2,090	8.96%
Rohnert Park	Sonoma	1,220	5.23%
Santa Rosa	Sonoma	835	3.58%
Sebastopol	Sonoma	50	0.21%
Remainder of Sonoma County	Sonoma	1,670	7.16%
<i>Subtotal: Sonoma County</i>	<i>Sonoma</i>	<i>6,075</i>	<i>26.04%</i>
<i>All Other Locations</i>	<i>N/A</i>	<i>4,278</i>	<i>18.34%</i>
Total		23,328	100.00%

Note:

(a) Data regarding worker residence location for people employed in Novato are used as an indicator for likely residence location of workers employed at the alternate project site (Lakeville Hwy./Hwy. 37).

Sources: Metropolitan Transportation Commission, 2005; Bay Area Economics, 2006

Table 7: Labor Force Participation Rates and Unemployment Rates

	Sonoma County		Rohnert Park		Santa Rosa	
	2003	Peak 1990-2003	2003	Peak 1990-2003	2003	Peak 1990-2003
Total Population Over 16 (a)	366,732		32,288		120,536	
Labor Force	257,544		25,791		73,671	
Labor Force Participation Rate (b)	70%	72%	80%	82%	61%	67%
Unemployment Rate	4.9%	2.6%	5.5%	2.6%	4.7%	2.6%
						1999-2000
						1999-2000

	Petaluma		Marin County		Novato	
	2003	Peak 1990-2003	2003	Peak 1990-2003	2003	Peak 1990-2003
Total Population Over 16 (a)	43,724		205,988		38,047	
Labor Force	29,534		129,749		25,836	
Labor Force Participation Rate (b)	68%	73%	63%	70%	66%	75%
Unemployment Rate	4.0%	2.1%	3.9%	1.6%	3.5%	1.5%
						2000
						2000

	San Francisco MSA	
	2003	Peak 1990-2003
Total Population Over 16 (a)	5,506,184	
Labor Force	3,607,246	
Labor Force Participation Rate (b)	65%	69%
Unemployment Rate	6.5%	2.5%
		2000

Notes:

(a) Assumes that the age distribution is not changing for the percent of the population over 16.

(b) Labor Force Participation rate equals the labor force divided by the total population over 16.

Sources: Bureau of Labor Statistics, 2004; U.S. Census, 2000; U.S. Census, 1990; Bay Area Economics, 2006

Table 8: Number of Jobs Absorbed by Current Residents

	Sonoma County Potential Employment	Rohnert Park Potential Employment	Santa Rosa Potential Employment	Petaluma Potential Employment	Martin County Potential Employment	Novato Potential Employment
Total Population Over 16 (a)	366,732	32,288	120,536	43,724	205,988	38,047
Historic High Labor Force Participation Rate (b)	72.2%	82%	67%	73%	70%	75%
Maximum Potential Labor Force	264,764	26,364	81,241	31,743	143,574	28,650
Historic Low Unemployment Rate	2.6%	2.6%	2.6%	2.1%	1.6%	1.5%
Maximum Number of Potential Employed Residents (c)	257,880	25,678	79,129	31,077	141,276	28,220
Current Number of Employed Residents (d)	244,924	24,372	70,208	28,737	124,689	24,932
Maximum Number of Area Residents Available to Absorb Casino Jobs (e)	12,356	1,306	8,921	2,340	16,588	3,288
Anticipated Number of Casino Employees Who Will Live in Area						
Proposed Casino, Alternatives A, B, and C (f)	2,227	814	677	132	40	16
Reduced Intensity Casino, Alternative D	1,949	712	593	115	35	14
Business Park, Alternative E	1,856	678	564	110	33	13
Casino at Alternate Location, Alternative F (f)	625	126	86	215	1,335	848
No Action, Alternative G	280	102	85	17	5	2
Reduced Intensity Casino, Alternative H	1,949	712	593	115	35	14
Net Number of In-Migrants Needed to Fill Available Jobs (g)						
Proposed Casino, Alternatives A, B, and C	0	0	0	0	0	0
Reduced Intensity Casino, Alternative D	0	0	0	0	0	0
Business Park, Alternative E	0	0	0	0	0	0
Casino at Alternate Location, Alternative F	0	0	0	0	0	0
No Action, Alternative G	0	0	0	0	0	0
Reduced Intensity Casino, Alternative H	0	0	0	0	0	0

Notes:

- (a) Total population over 16 is approximately equal to the maximum number of people who are eligible to work or be in the labor force.
- (b) The maximum potential labor force is equal to the current population over 16 multiplied by the historic high labor force participation rate.
- (c) The maximum number of potential employed workers is equal to the maximum potential labor force multiplied by the historic low unemployment rate.
- (d) This is the actual number of people currently employed in each area.
- (e) This is number of maximum potential workers minus the number of people currently employed.
- (f) Uses the average of the high and low employee estimates for direct casino employment.
- (g) If anticipated number of casino employees who will live in the area is less than maximum number of residents available to absorb casino jobs, the net number of in-migrants needed is zero.

Fiscal Impacts

In addition to determining the indirect and induced impacts on Sonoma County, BAE also examined the fiscal impacts of the casino on Rohnert Park and Sonoma County. Although the casino is adjacent to the City, technically, there will not be an increase in the local service population for the City, since the proposed casino would be located on land that is held by the federal government in trust for the Tribe.³² Additionally, our earlier analysis has shown that the employees needed to staff the proposed casino could be drawn from the existing labor pool, meaning that the proposed casino would not generate secondary service demand from its employees who may choose to live in Rohnert Park. Rather, there are adequate numbers of people living in Rohnert Park and nearby who are not already employed who could fill those new jobs. Again, since the proposed casino will add the largest number of jobs, this analysis assumes that since current residents can absorb all jobs associated with the potential casino, they can also absorb all jobs associated with the other alternatives. The City is already providing services to those local residents; thus, we do not expect a significant increase in City service demand or costs for any of the alternatives, except the No Action alternative. On the other hand, in order to analyze the impacts conservatively, the analysis assumes that Sonoma County will experience an increase in its service population if the proposed casino is built.³³ We can anticipate an increase in costs associated with the increased visitation and spillover effects from casino employees for the City as well as the County.

This portion of the analysis uses an average cost per service population method for calculating costs of providing new City and County services to the casino. The number of new employees is multiplied by a factor of one-half to reflect the industry standard assumption that commercial uses demand fewer services than residential uses. As the calculation is based on total new employees, it accounts for the extended hours of operation at the casino that will result in additional shifts, and therefore, additional employees. The calculation does not include the patron population because the employment figure captures the patrons' portion of demand. The rationale is that the number of employees necessary to staff a facility capable of drawing the number of patrons for which the casino is designed, is representative of the demand for services created by the facility, including casino visitors. Baseline cost figures are calculated by dividing the total service costs in the City or County for the current year by the existing service population. As with retail uses, where customers are present during hours of operation, this per service population cost factor accounts for service demand from customers. Following is a discussion of the fiscal impacts of the proposed casino and alternatives to the City of Rohnert Park and Sonoma County.

Fiscal Impact on the City of Rohnert Park

Because of the proposed casino's proximity to the City and contributions for facilities outlined in the Memorandum of Understanding (MOU), the Tribe would most likely contract with the City for fire and emergency services to the Wilfred or Stony Point sites. In addition, the proximity of

³² This is true for all alternatives except for the No Action alternative. Under the No Action alternative, the City would annex the land from the County, thereby increasing the service demands for the City.

³³ This is technically inaccurate because the land will be taken into trust. However, the projection of an increase in service population provides a conservative estimate of the fiscal impacts to the County.

the casino to the City will generate additional traffic through Rohnert Park, and thus, some need for City service providers, such as police and fire, to provide additional service in the surrounding areas, generating a fiscal burden on the City. The MOU established between the City and the Tribe stipulates the amount of mitigation revenues that the casino will give to the City. Although the existing MOU did not originally apply to the Wilfred site, the Tribe has adopted a resolution that extends the jurisdiction of the MOU to include the full casino alternative at the Wilfred site and project representatives do not anticipate changes to the payment portion of the agreement. Under the existing MOU, the Tribe would provide funding for the City to build a fully staffed public safety building³⁴ on the west side of Rohnert Park that would be completed and in operation prior to the opening of the casino. Based on the level of contributions and the specified location of the facility, this analysis assumes that the City will provide fire and emergency services to the casino site. This portion of the study examines the likelihood that the agreed upon payments would sufficiently mitigate any extension of City services made necessary by the casino.

City Revenues. Since there will not be a direct increase in the service population associated with the proposed casino, other casino alternatives, or the business park alternative, there will be no additional sales tax revenues, motor vehicle in lieu fees, and franchise fee revenues that City can expect to collect from an increased service population. There will likely be some additional sales tax collections from people traveling through Rohnert Park to and from the Casino; however that additional revenue is not measurable at this time and is probably fairly minor in relation to the overall City budget. For the No Action alternative, the Tribe would not take the land into trust, and the City would annex the land from the County, thereby allowing the City to collect revenues from the development. Total revenues at buildout would amount to approximately \$765,000 per year. Appendix D shows the detailed fiscal analysis for the No Action alternative.

City Service Costs. Although there is not likely to be an increase in the number of Rohnert Park residents, the City can anticipate increases in fire and emergency requirements. Due to its proximity to the proposed casino hotel and the contribution of a new public safety building as specified in the MOU, the City would be expected to a first responder to emergency situations that occur at the proposed casino.³⁵ However, since the site is not located within the City, this analysis assumes that the City will only provide fire and emergency services to the proposed casino hotel and non-casino alternatives. The City would not provide other municipal services such as park and recreation, public works, or other services to the site unless the City annexed the site from the County. As the development alternatives would include that the site be taken into federal trust, the City would not be responsible for providing these services to the site absent a contract with the Tribe.

Based on the City's current General Fund cost structure, and by calculating simple average costs

³⁴ Memorandum Of Understanding, 2003.

³⁵ Additional evidence that the City would provide public safety services to the site exists in the MOU, which states that upon the Tribe's request, the City's Public Safety Department will enter into law enforcement and fire protection mutual aid agreements with the Tribe. Memorandum of Understanding, 2003. Despite the allusion to law enforcement, this analysis only assumes that Rohnert Park would provide the casino with fire and emergency services.

per current service population, we have found that the City spends on average, \$222 per year, per service population on fire and emergency services within Rohnert Park.³⁶ This generates potential annual costs to the City of between \$284,600 and \$289,100 for providing some fire and emergency services to the proposed casino, approximately \$233,500 for the reduced intensity alternative at the Stony Point Site, or approximately \$222,400 for the business park. As the No Action alternative would require the City to annex the site and therefore provide the full range of City services to the new development, the projected costs associated with its development would be approximately \$640,000 per year. As the MOU is not applicable to the reduced intensity casino alternative at the Wilfred site, the City would not incur any additional fiscal costs. Table 9 shows the projected increase in service costs to the City associated with the different alternatives.

City of Rohnert Park Net Fiscal Impacts. Based on this review of potential service demand/costs and potential revenues, it appears that there would be annual costs to the City from the proposed casino of approximately \$289,100 per year.³⁷ However, as previously stated, and as discussed further below, the Tribe has agreed to contribute funds annually to the City in order to mitigate any unforeseen impacts of the casino. In addition, under the MOU³⁸, the Tribe will donate approximately \$10.9 million to fund capital improvements including an additional fire truck, and widening of the roads leading to the casino. The additional fire truck and public safety building and related staffing increases will have two positive impacts. First, they will provide additional back-up capabilities for the City of Rohnert Park. Currently, Rohnert Park has an automatic aid agreement with the County and other local jurisdictions whereby other fire departments in the region back up the Rohnert Park Public Safety Department in the event of a fire emergency and Rohnert Park's department provides back-up services for fire emergencies in the other jurisdictions as well. The new fire truck will not only give the City better capabilities for internal back-up; it will also provide additional resources for providing back-up services to other agencies that are parties to the automatic aid agreement, thereby creating a benefit to the overall region.

The Tribe will donate approximately \$9.7 million per year to the City to mitigate any ongoing impacts. The intended distribution of these revenues is shown in Table 10. This is equal to approximately 37 percent of the City's existing General Fund budget. According to Sergeant Arthur Sweeney of the Rohnert Park Public Safety Department, contributions specified in the MOU should sufficiently mitigate the impacts of the casino, so that the City can provide emergency services to the casino without reducing service standards elsewhere in the City.³⁹

³⁶ This includes police personnel costs as all Rohnert Park police officers are trained and often act as fire fighters. Including police personnel costs provides a conservative estimate of fire and emergency costs.

³⁷ These costs do not include any potential costs of a disproportionate increase in crime related to casino operations, the Social Impacts section of this analysis provides a discussion of such costs.

³⁸ The MOU is currently valid for alternatives located at the Stony Point Site and Lakeville Site, and would require renegotiation to be valid for the proposed casino at the projected location or all other alternatives. Renegotiation is likely for the proposed Wilfred Site and reduced intensity alternative. However, should the reduced intensity alternative be chosen, the MOU would probably have lower payments. For the Business Park and Lakeville Alternatives, there would likely be a vastly different MOU or no MOU between the Tribe and the City.

³⁹ Phone Conversation with Sergeant Arthur Sweeney, 2006.

Although this analysis assumes the same contribution under the MOU for the Alternative D reduced intensity casino, the actual contribution for the reduced intensity alternative will be lower as MOU contributions are tied to casino sales.⁴⁰ At the same time, impacts on City services should also be reduced under a reduced intensity alternative. Accounting for these annual contributions, the City can expect that any of the projects under Alternatives A, B, C, D, E, and F will generate significantly more revenues than costs.

Fiscal Impacts on Sonoma County

Since the proposed casino will be located on land that is currently within the County, the analysis projects County service costs using the assumption that the proposed casino would increase the County's service population, as there is no method for accurately estimating the impacts of a project on trust land versus a project on non-trust land.⁴¹ In this case, there will be an increase in the service population of approximately 1,200 persons, which is assumed to be equal to one-half the estimated number of casino employees. Table 11 shows the projected County service population associated with the proposed casino and other alternatives. This increase in County service population can potentially generate increased costs; however, employees are typically thought to create much less demand than residents. At the same time, because the proposed casino site would be in federal trust on behalf of the Tribe, Sonoma County will have no authority to directly collect revenues from the casino. This means that absent an agreement between the Tribe and the county, there is likely to be little flow of funds from the proposed casino to the County.

County Revenues. For the most part, the County will not directly collect any revenues from the proposed casino. This is because the property will not be subject to local property taxation, nor will facilities on site be required to collect sales taxes. The County will not have authority to levy other types of taxes and charges on the casino operation. Small increases in revenues may be expected as a result of the proposed casino facility for items such as local fines and forfeitures, to the extent that casino patrons or employees are cited for infractions off the casino premises. As shown on Table 12, those revenues of the type that would not rely on direct levies of taxes on the facility itself would generate approximately \$143 per service population countywide, annually. For the No Action alternative, the land would not be placed in federal trust, and the City would annex and develop the land under guidelines in the Northwest Specific Plan. Under these conditions, the County would be able to collect approximately \$700,000 in annual revenues from development. Appendix E shows the detailed revenue projections for the No Action alternative.

County Service Costs. Based on the County's current General Fund cost structure, and by calculating simple average costs per current service population, we have found that the County spends on average, \$283 per year, per service population on municipal services financed with General Fund monies within the unincorporated area. However, the Tribe drafted an MOU with the City of Rohnert Park, stipulating that the Tribe would mitigate any potential impacts to the

⁴⁰ According to the Tribe, the MOU does apply to both the Alternative D reduced intensity and business park alternatives; however, the development of these alternatives would allow the Tribe to renegotiate certain terms of the MOU. Memorandum of Understanding, 2003.

⁴¹ Since the land would be taken into trust, the casino would not generate an increase in the County's service population.

City from increased demand for fire and emergency services, specifically, the MOU states that the Tribe will contract with the County or private contractors to provide adequate law enforcement, fire protection, and emergency services for the casino site.⁴² Given the contributions to the City of Rohnert Park to construct a new public safety facility and purchase a fire truck, and the specific location of that facility, as well as the site's proximity to the City, this analysis assumes that the Tribe would contract with the City to provide fire and emergency services. However, the analysis does not assume that the City would provide law enforcement services. Remaining County services potentially include: general government services that provide oversight to the County's operations, Health and Sanitation department services, Sheriff services, Public Ways and Facilities, Education, Recreation and Cultural services, District Attorney, Public Defender, Superior/Municipal Court, Grand Jury, County Clerk, Detention, Probation Department, Juvenile Halls, Permit and Resource Management, Agricultural Commissioner, Local Agency Formation Commission, Recorder, and Public Assistance services.⁴³ Table 13 shows the net cost impacts to the County from the proposed casino and other alternatives.

It should be noted, that the existing MOU is only valid for alternatives A, B, C, D, and E, and that for all other alternatives the MOU is not applicable. In the case of Alternative F, which includes a casino that would be located at the Lakeville site, the County would need to open and operate a new fire station to serve the casino. Currently, the County oversees several rural volunteer fire departments throughout the County. One such department, the Lakeville Volunteer Fire Department that operates in CSA-40, operates in the area that includes the Lakeville site. Under Alternative F, the County would not be able to provide fire protection services at the casino using the volunteer department, and would need to implement a full service fire station. According to County staff, the annual costs of operating a staffed station would be approximately \$1,000,000 per year. Although the casino would trigger this cost increase, it would not be the only property to benefit from the increased service standards in the area. Thus, the casino would not be liable for the entire cost. However, since there is no way to accurately estimate the casino's portion of the costs, and to provide a conservative estimate of the fiscal impacts to the County, the analysis allocates the entire \$1,000,000 cost of operating the fire station to the County's fiscal impacts.

For alternative H, the reduced intensity casino alternative at the Wilfred site, the Tribe would need to enter an agreement with the City of Rohnert Park, Sonoma County, or the Rincon Valley Fire Protection District for fire and emergency services. The Wilfred site is technically located within the Rincon Valley Fire District near the Todd Road station; however, once the land is taken into a federal Trust, the district no longer has the jurisdiction to serve the site. Absent an agreement, no fire department would serve the site. Any agreement that the Tribe makes for fire services would require financial mitigation, which the service providing agency would negotiate

⁴² Memorandum of Understanding, 2003.

⁴³ Although these costs do not include the costs that the County or Rincon Fire District would incur from providing mutual aid for emergency services to the site, Chief Doug Williams of the Rincon Fire District indicated that such costs would be negligible. He estimates that the City and County provide an equal amount of mutual aid services to each other, and that the addition of a new fire engine would allow for better fire protection services throughout the region. Phone Correspondence, Fire Chief Doug Williams, December 21, 2006.

with the Tribe, and would presumably cover the costs of providing services.

Net Fiscal Impacts, Sonoma County. Based on the preceding assessment of the situation, there proposed casino will generate a negative fiscal impact to the County based on an expectation of increased County service costs coupled with no significant anticipated increase in revenues. With no offsetting revenue, the County's net fiscal impact will be approximately equal to the net cost impacts identified in Table 14. As shown, the anticipated net fiscal cost to the County from the proposed casino project is between \$153,800 and \$181,700 per year, after accounting for the assumption that the casino will enter into an agreement with the City to provide fire and emergency services. This impact is minimal relative to the size of the overall County budget, and would therefore have a minimal impact on the County. Net costs for the other alternatives vary according to their intensity, which is expressed in terms of greater or lesser service populations. Alternative F represents the greatest fiscal deficit to the County as it includes the operation of a new staff fire station near the Lakeville site. As the analysis shows, if the proposed casino is not built, and the site were developed under the Northwest Specific Plan guidelines, the County would have a positive net fiscal balance of approximately \$435,000 per year.

Impacts to Property Values

The addition of a casino within a local community may result in changes to local property values, which could impact local tax assessor rolls and in turn impact local property tax revenues. In addition, changes in the appreciation rates of properties adjacent to the casino could also impact future property tax revenues. However, the direction and magnitude of the change can be mixed, as property values are based on a host of factors, and depend on the relative proximity of the homes to the casino, and whether the casino is located in an urban area. According to an Arthur Anderson study, in relatively rural areas, casinos resulted in property value increases.⁴⁴ However, as the Graton Rancheria casino would be located in a relatively urban area, these findings may not hold.

Homes located within close proximity (one mile or less) to the casino, tend to experience decreases in home values. According to the Illinois Real Estate Letter, a study by the Lied Institute of Real Estate Studies at the University of Las Vegas, Nevada showed that a new casino built within one mile of a residential household will result in a 4.6 percent decrease in home values.⁴⁵ The authors conducted this study using home prices from suburban Las Vegas, where there are a number of casinos located within residential neighborhoods. However, it should be noted that the Bay Area housing market tends to be stronger than elsewhere in the nation, and may be resistant to changes related to the casino. In the Bay Area, home values are stagnant compared to the rest of the State and Nation, which has experienced decreases in home values. It

⁴⁴ Arthur Andersen. *Economic Impacts of Casino Gaming in the United States – Vol. 2: Micro Study*. American Gaming Association, 1997.

⁴⁵ Clauretje, Terrence M., Thomas M. Carroll, and Nasser Daneshvary. "Rolling the Dice: Would Casinos Harm Illinois Home Values?" *Illinois Real Estate Letter*. Vol. 12, No. 1. Winter, 1998.

is likely that the relative scarcity of homes in the area, coupled with the desirability of the region will be much stronger factors in determining home value than the existence of a casino within the local community.

The Lied Institute's study also found that homes located more than one mile from the casino site experienced no impact on property value from casinos.⁴⁶

As property values and property taxes can vary for a variety of reasons unrelated to the casino, it is not possible to measure the impacts to property values or property tax revenues. For example, if property values decrease in the first year of the casino's opening but rebound shortly thereafter, there could be larger impacts to property taxes from owners selling in the first year and minimal impacts from those homeowners that do not sell until after the rebound. For reasons such as those cited above, any attempt to measure the impacts to property values or property tax revenues would be purely speculative.

Impacts to Nearby Communities

Although the communities of Santa Rosa, Cotati, and Petaluma would not be responsible for providing services to the casino, they may experience some indirect impacts from resident problem and pathological gamblers. The Social Impacts section of this Socioeconomic Impact Report provides an examination of these impacts.

⁴⁶ Ibid.

Table 9: Projected Service Costs, Rohnert Park

	Rohnert Park		Percentage					
2004 Population	42,329							
2004 Employment	17,474							
2004 Service Population	51,066							
General Fund Appropriations								
Police/Fire Personnel (a)	\$10,837,777		95%					
Fire Protection	\$517,100		5%					
2003-04 General Fund Expenditures	\$11,354,877							
Annual Per Service Population Expenditures	\$222							
Estimated Impacts	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G	Alternative H
Service Population (b)	Proposed Action	First Alternate On-Site Location	Second Alternate On-Site Location	Reduced Intensity	Business Park	Alternate Off-Site Location	No Action	Reduced Intensity
High Estimate (c)	1,300	1,300	1,300	1,050	1,000	1,300	1,482	1,050
Low Estimate (d)	1,100	1,100	1,100	1,050	1,000	1,100	1,482	1,050
Costs								
High Estimate (c)	\$289,064	\$289,064	\$289,064	\$233,475	\$222,357	\$289,064	\$640,445 (e)	\$0
Low Estimate (d)	\$244,593	\$244,593	\$244,593	\$233,475	\$222,357	\$244,593	\$640,445 (e)	\$0

Notes:

- (a) Because police officers act as trained fire personnel, their costs are included in this analysis. This provides a conservative estimate of the fiscal costs associated with the casino alternatives.
- (b) Service Population is equal to one half the number of projected employees plus the number of residents. The service population calculation reduces the demand from employees to show a lower level of demand for public services than from residents.
- (c) The high estimate reflects the scenario where the proposed casino employs the highest number of workers provided in the project description.
- (d) The low estimate reflects the scenario where the proposed casino employs the lowest number of workers provided in the project description.
- (e) Since the site would be annexed into the City of Rohnert Park under the No Action alternative, and would not be taken into trust, these cost figures include demand for all City Services. Appendix D provides greater details on cost and revenue projections for the No Action alternative.

Sources: CA Department of Finance, 2004; City of Rohnert Park Budget, 2003-04; Memorandum of Understanding, 2003; BAE, 2006

Table 10: Summary of Payments Under City/Tribe MOU

Annual MOU Contributions Summary (a)	
Neighborhood Enforcement Team (NET)	\$500,000
Problem Gamblers Programs	\$125,000
Education Trust	\$1,000,000
Graton Rancheria Charitable Foundation	
For Rohnert Park (b)	\$2,000,000
Neighborhood Upgrade/Workforce Housing	\$1,000,000
Storm water Drainage Mitigation	\$50,000
Supplemental Contributions	\$5,000,000
Total Annual Contributions (c), (d)	\$9,675,000

Notes:

- (a) BAE only includes annual contributions in this summary. The MOU also provides for one time contributions which will affect public safety.
- (b) City will determine how \$1 million will be spent, and Tribe will determine how \$1 million will be spent.
- (c) Since MOU contributions are based on casino revenues, these MOU contribution estimates for the reduced intensity alternative are high. However, they are sufficiently close to use them for this analysis.
- (d) MOU contributions are based on a previous project location and will be renegotiated. However, the Tribe does not anticipate significant differences in payment upon renegotiation.

Sources: Memorandum of Understanding between Graton Rancheria and Sonoma County, 2003; Bay Area Economics, 2006

Table 11: Estimated New Service Population, Sonoma County

Existing Sonoma County Population	472,725
Total Existing Residents	179,565
Total Existing Households	
Total Number of Jobs/Employees	223,466
Total Service Population	584,458

Estimated Impacts	Alternative A Proposed Action	Alternative B First Alternate On-Site Location		Alternative C Second Alternate On-Site Location		Alternative D Reduced Intensity	Alternative E Business Park	Alternative F Alternate Off-Site Location		Alternative G No Action	Alternative H Reduced Intensity
		High Estimate	Low Estimate	High Estimate	Low Estimate			High Estimate	Low Estimate		
Residents											
High Estimate	0	0	0	0	0	0	0	0	0	1,331	0
Low Estimate	0	0	0	0	0	0	0	0	0	1,331	0
Employment											
High Estimate	2,600	2,600	2,600	2,600	2,100	2,100	2,000	2,600	302	302	2,100
Low Estimate	2,200	2,200	2,200	2,200	2,100	2,100	2,000	2,200	302	302	2,100
Estimated Total Service Population (a)	1,300	1,300	1,300	1,300	1,050	1,050	1,000	1,300	1,482	1,482	1,050
High Estimate (b)	1,100	1,100	1,100	1,100	1,050	1,050	1,000	1,100	1,482	1,482	1,050
Low Estimate (c)											

Notes:

- (a) Service population equals the total county population plus one-half of local employment.
- (b) The high estimate reflects the scenario where the proposed casino employs the highest number of workers provided in the project description.
- (c) The low estimate reflects the scenario where the proposed casino employs the lowest number of workers provided in the project description.

Source: California Dept. of Finance, 2004; BAG, 2004; and Bay Area Economics 2006

Table 12: Net Revenues, Sonoma County

	Sonoma County	Percentage								
2004 Service Population	584,458									
Revenue Sources										
Taxes	114,600,000	58%								
Charges for Service/Program Fees	47,300,000	24%								
Other (e)	36,200,000	18%								
2003-04 General Fund Revenues (b)	198,100,000									
Annual Non-Taxes Per Service Population Revenues	\$143 (c)									
Estimated Impacts			Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G	Alternative H
Estimated Total Service Population			Proposed Action	First Alternate On-Site Location	Second Alternate On-Site Location	Reduced Intensity	Business Park	Alternate Off-Site Location	No Action	Reduced Intensity
High Estimate (d)			1,300	1,300	1,300	1,050	1,000	1,300	1,482	1,050
Low Estimate (e)			1,100	1,100	1,100	1,050	1,000	1,100	1,482	1,050
Estimated Annual Revenues from New Service Population										
High Estimate			\$185,728	\$185,728	\$185,728	\$150,011	\$142,867	\$185,728	\$695,946 (f)	\$150,011
Low Estimate			\$157,154	\$157,154	\$157,154	\$150,011	\$142,867	\$157,154	\$695,946 (f)	\$150,011

Notes:

- (a) Includes Licenses/Permits/Franchises (\$13.9 million), Fines/Forfeitures/Penalties (\$6.7 million), Miscellaneous Revenues (\$3.6 million), Use of Money (\$7.1 million), and other Financing Sources (\$4.9 million).
- (b) General Fund Revenues net of intergovernmental (Federal and State) revenues, and prior year reserves.
- (c) This is the sum of charges for services/program fees plus Other revenues, divided by the 2004 service population. These are the County revenues that could potentially increase in response to the increased service population associated with casino employment.
- (d) The high estimate reflects the scenario where the proposed casino employs the highest number of workers provided in the project description.
- (e) The low estimate reflects the scenario where the proposed casino employs the lowest number of workers provided in the project description.
- (f) Revenue estimates for the No Action alternative are generated differently than for the other alternatives because under Alternative G the land would not be taken into trust, and the City of Rohnert Park would annex the land from the County. Thus, these revenue estimates do not follow the same methodology as the other alternatives. Appendix D provides a detailed breakout of cost and revenue estimates for Alternative G.

Sources: CA Department of Finance, 2004; Sonoma County City Budget, 2003-04; Sonoma County Staff, 2006; BAE, 2006

Table 13: Net Costs, Sonoma County

2004 Service Population		Sonoma County	
2003-04 General Fund Expenditures (a)		584,458	
	Percentage		
General Government	14%	\$22,900,000	
Health/Sanitation	3%	\$4,400,000	
Other (b)	2%	\$2,500,000	
General Government Transfers	1%	\$1,100,000	
Sheriff and Emergency Services, Net of Law Enforcement Dispatch Services	38%	\$62,100,000	
Dispatch Services, Law Enforcement Only (c)	2%	\$3,000,000	
All Other Public Protection (d)	38%	\$63,400,000	
Public Assistance	4%	\$5,800,000	
Total	100%	\$165,200,000	
Annual Per Service Population Expenditures (e)		\$283	
Annual Net Per Service Population Expenditures (f)		\$176	
Fire Protection Services at Lakeville Site (g)		\$1,000,000	

Estimated Impacts	Alternative A Proposed Action	Alternative B First Alternate On-Site Location	Alternative C Second Alternate On-Site Location	Alternative D Reduced Intensity	Alternative E Business Park	Alternative F Alternate Off-Site Location	Alternative G No Action	Alternative H Reduced Intensity
Estimated Total Service Population	1,300	1,300	1,300	1,050	1,000	1,300	1,482	1,050
High Estimate (h)	1,100	1,100	1,100	1,050	1,000	1,100	1,482	1,050
Low Estimate (i)								
Estimated Annual Service Costs from New Service Population								
High Estimate	\$367,452	\$367,452	\$367,452	\$296,788	\$282,655	\$1,367,452 (j)	\$261,400 (k)	\$296,788 (l)
Low Estimate	\$310,921	\$310,921	\$310,921	\$296,788	\$282,655	\$1,310,921 (j)	\$261,400 (k)	\$296,788 (l)

Notes:

- (a) General Fund Expenditures reflect County expenditures paid for with discretionary revenues. These figures net out non-discretionary costs that use earmarked intergovernmental revenues.
- (b) Includes Public Ways/Facilities, Education, Recreation/Cultural Services, Provisions for Reserves/Designations, and Appropriations for Contingencies.
- (c) County provides dispatch for law enforcement only. The County and cities contract with a private company to perform dispatch services for fire and EMS. Payment for fire and EMS services will be accounted for in the public safety departments (i.e. Sheriff, Emergency Services, etc.) in the County and cities.
- (d) Includes District Attorney, Public Defender, Superior/Municipal Court, Grand Jury, County Clerk, Detention, Probation Department, Juvenile Halls, Permit and Resource Management, Agriculture Commissioner, L.A.F. C.O., and Recorder.
- (e) Under the MOU, the Tribe has an agreement to fund fire protection sufficiently to cover the cost of supplying the casino with fire protection services. Although there is no amount currently stipulated in the MOU for the county, there is language which states that "the Tribe shall...make internal arrangements and make appropriate arrangements with the County or a private contractor(s) to insure that there is an adequate level of fire protection and emergency medical service available on the Reservation.
- (f) Under the No Action Alternative, the City of Rohnert Park would annex the site prior to development, and thus, would be responsible for providing the site with law enforcement, fire, and emergency services.
- (g) Under Alternative F, the County would need to provide fire services to the Lakeville site. Currently, a volunteer fire department operates in the Lakeville area, and would continue to do so absent a new casino. County staff estimate that the new casino would require a staffed fire station with three firefighters, working three shifts per day. County staff estimates that the annual cost of operating this station would be approximately \$1,000,000. Although the casino would trigger the \$1,000,000 cost, it would not be only property in the area to benefit from the new station. Thus, the \$1,000,000 cost is a high estimate of the fiscal impacts from providing fire protection services to the casino under Alternative F.
- (h) The high estimate reflects the scenario where the proposed casino employs the highest number of workers provided in the project description.
- (i) The low estimate reflects the scenario where the proposed casino employs the lowest number of workers provided in the project description.
- (j) These alternatives assume that Sonoma County will be responsible for providing Sheriff and Emergency Services, and fire protection services to the development.
- (k) Cost estimates for the No Action alternative use net per service population expenditure estimates as the City would annex the land from the County, and therefore be responsible for providing police and fire protection.
- (l) Since the MOU between the Tribe and City is not applicable to this alternative, the analysis assumes that the Rincon Valley Fire District would provide the site with fire services.

Sources: CA Department of Finance, 2004; Sonoma County Budget, 2003-04; Sonoma County Budget 2005-06; Memorandum of Understanding, 2003; Sonoma County Staff, 2006; BAE, 2006

Table 14: Net Fiscal Impacts, Sonoma County

Estimated Impacts	Alternative A Proposed Action	Alternative B First Alternate On-Site Location	Alternative C Second Alternate On-Site Location	Alternative D Reduced Intensity	Alternative E Business Park	Alternative F Alternate Off-Site Location	Alternative G No Action	Alternative D Reduced Intensity
Net Annual Cost Increase (a)								
High Estimate	\$367,452	\$367,452	\$367,452	\$296,788	\$282,855	\$1,367,452	\$261,400	\$296,788
Low Estimate	\$310,921	\$310,921	\$310,921	\$296,788	\$282,855	\$1,310,921	\$261,400	\$296,788
Net Annual Revenue Increase (b)								
High Estimate	\$185,728	\$185,728	\$185,728	\$150,011	\$142,867	\$185,728	\$695,946	\$150,011
Low Estimate	\$157,154	\$157,154	\$157,154	\$150,011	\$142,867	\$157,154	\$695,946	\$150,011
Net Annual Fiscal Impact								
High Estimate	(\$181,724)	(\$181,724)	(\$181,724)	(\$146,777)	(\$139,788)	(\$1,181,724)	\$434,546	(\$146,777)
Low Estimate	(\$153,766)	(\$153,766)	(\$153,766)	(\$146,777)	(\$139,788)	(\$1,153,766)	\$434,546	(\$146,777)

Notes:

- (a) Negative value denotes lower costs than with a non-gaming venture.
- (b) Negative value denotes lower revenues than with a non-gaming venture.

Source: BAE, 2006

Operating Period Market Impacts

This portion of the study explores the potential impacts of the proposed casino on the existing Indian casino gaming marketplace. This issue has been raised as a concern, as there are two existing Indian casinos within a relatively close distance of the proposed Wilfred casino site. The effects of the potential competition has been raised as a concern issue relating to environmental justice, to the extent to which potential competition from the proposed facility would create a disproportionate burden on the tribal groups that operate the existing casinos. In this section, we examine the nature of the northern California casino market, existing conditions at the two nearby competitive facilities, the potential demand to support the existing facilities plus the proposed facilities, and the possible impacts of the proposed facility on the economic performance of the existing facilities. With the exception of these two casinos, there are no other casinos within 75 miles of the Wilfred and Stony Point sites, and within 100 miles of the Lakeville site.⁴⁷

Northern California Casino Slot Machine Market

In the Northern California region⁴⁸, there are 26 Indian gaming casinos, which have a total of 17,308 gaming machines.⁴⁹ In 2004, the population of the Northern California region 21 and over totaled 8,444,299. These figures translate to 488 persons 21 and over per gaming machine in Northern California.

Competitive Supply. The two Indian gaming casinos that are located nearest to the proposed Graton Rancheria facility are River Rock Casino in Geyserville (pop. 2,400), and Twin Pine Casino in Middletown (pop. 1,000). River Rock Casino is in Sonoma County and is 31 miles from the proposed Graton Rancheria site. Twin Pine Casino is in Lake County and is 37 miles from the Graton site.

River Rock Casino. River Rock Casino in Geyserville has been open since 2002 and is owned by the 768-member Dry Creek Rancheria Band of Pomo Indians. The River Rock Casino facility is a 70,000 sq. ft. sprung tent structure that includes 35,500 sq. ft. of gaming space. The sprung tent structure is constructed with aluminum arches that are connected to an all-weather outdoor membrane that is flame retardant and is designed to withstand high wind loads. The estimated construction cost for the casino facility is \$40 million. In addition, River Rock is spending an estimated \$37 million to construct a seven-level parking structure with 1,354 spaces.⁵⁰

The River Rock facility includes 1,600 slot machines, 16 gaming tables, two restaurants, a wine tasting room, a small gift shop, and a large outdoor patio with a view that overlooks the Alexander Valley. Since it is located 75 miles from San Francisco, the River Rock Casino

⁴⁷ Distances are based on driving distance.

⁴⁸ Includes the counties of Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Glenn, Humboldt, Lake, Lassen, Marin, Mendocino, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tuolumne, Yolo, and Yuba.

⁴⁹ Casino City Press, 2004 Global Gaming Almanac, 2004.

⁵⁰ Kovner, Guy. "River Rock forecasts traffic to soar by 50%," *The Press Democrat*, 3 April 2004.

marketing campaign highlights the facility's status as "The Bay Area's Closest Casino."

Published reports quoting statements from River Rock's general manager indicate that 40 percent of the daily visitorship to River Rock arrives by passenger vehicle, and 60 percent is brought to the site by River Rock-operated tour buses. According to River Rock's general manager, the casino handles 1,200 cars per day with an average of 1.5 patrons per car.⁵¹ Based on these figures, it can be estimated that 1,800 patrons arrive at River Rock each day by car, and another 4,500 arrive via the casino-operated tour buses. This makes a total of 6,300 River Rock patrons per day, and 2,299,500 patrons per year.

The 2003 operating results for River Rock Casino show annual casino revenues of \$67.1 million. Of this amount, \$60.1 million is generated by slot revenue, and \$7 million is generated by table games revenue.⁵² With 1,600 slots and 16 tables, these figures translate to \$103 per slot per day (\$37,563 per slot per year), and \$1,199 per table per day (\$437,500 per table per year).

As of November 2007, the Dry Creek Pomo Tribe, who own the River Rock casino, plan to expand the River Rock casino to include an additional 1.5 million square feet of structures and parking.⁵³ Details regarding the number of new slot machines were not available.

Twin Pine Casino. Twin Pine Casino has direct frontage along Highway 29 in Middletown, displays prominent signage and offers an ample parking area. Middletown is known as "The Gateway to Lake County" and is situated halfway between Calistoga and Clear Lake. According to the State of California Department of Transportation, the section of Highway 29 that passes through Middletown has an average daily traffic volume of 9,100 vehicles.⁵⁴

Twin Pine Casino opened in 1995 and is owned and operated by the Middletown Rancheria Band of Pomo Indians. The new Twin Pine Casino facility is a sprung tent structure that has replaced the original 2,500 sq. ft. casino building. With approximately 5,000 sq. ft. of gaming space, 500 slot machines, eight gaming tables, a café that does not serve alcohol, and a location that is not in itself a destination, Twin Pine Casino cannot be viewed as a significant tourist attraction in the manner that River Rock Casino is. Rather, Twin Pine Casino takes advantage of its Highway 29 location by catering mainly to passing motorists, travelers driving to Clear Lake, and the resident market within a 30-minute drive.

No financial data are available for Twin Pine Casino; however, given its smaller size, fewer amenities, and location that is further away from a substantial population base as compared to River Rock, it is likely that Twin Pines generates substantially less revenue overall than River Rock and it is also likely that Twin Pines generates lower revenues than River Rock on an average per slot machine basis.

⁵¹ Ibid.

⁵² Business Wire. "River Rock Entertainment Authority Announces Fourth Quarter and Full Year 2004 Financial Results." 8 April 2004.

⁵³ Hart, Steve. "River Rock Seeks Money Partner." *Press Democrat*. November 15, 2007.

⁵⁴ State of California Department of Transportation, Traffic and Vehicle Data Systems Unit, Traffic Counts, www.dot.ca.gov

As of October 2007, the Middleton Rancheria of Pomo Indians, who own the Twin Pine casino, plan to expand the existing casino to include an additional 262 slot machines, 14 table games, and a 60-room hotel.⁵⁵

Estimated Impacts

River Rock Casino and Twin Pine Casino are nearly the same distance from the proposed Graton Rancheria site in Rohnert Park: River Rock is 31 miles from the Wilfred and Stony Point sites and Twin Pine is 37 miles from the Wilfred and Stony Point sites. In addition, River Rock and Twin Pine are nearly the same distance from the Lakeville site: River Rock is 43 miles from the Lakeville site and Twin Pine is 47 miles from the Lakeville site. Finally, the two casinos are nearly the same distance from San Francisco: River Rock is 75 miles from San Francisco and Twin Pine is 79 miles from San Francisco.

Based on the mileage figures presented above, it is reasonable to conclude that the opening of a casino in Rohnert Park, 25 miles closer to San Francisco than either River Rock Casino or Twin Pine Casino, will have a financial impact on River Rock and Twin Pine to the extent that patronage at the two sites is driven by their proximity to the Bay Area's population center.⁵⁶ The alternative site location (Lakeville Highway and Highway 37, northeast of Novato) is about 31 miles from San Francisco, or about 18 miles closer to San Francisco than the proposed Rohnert Park site.

Impact on Financial Performance. As stated above, River Rock Casino is located 75 miles from San Francisco. Because River Rock Casino's marketing theme is centered on its status as "The Bay Area's Closest Casino," and because the proposed Graton casino will eliminate River Rock's location advantage, this analysis provides an estimate of the potential impact the proposed Graton facility will have on River Rock's financial performance.

According to a 2003 study prepared by industry specialist Cummings Associates, as the distance of a gaming attraction from a market area increases by 100 percent, its revenue declines by 38 percent.⁵⁷ Cummings Associates based this conclusion on data from a wide variety of markets that indicate that total spending declines less than in direct proportion to the distance traveled. This type of relationship is known as a gravity model and it supports the logical inference that, other things being equal, customers are more likely to visit a facility that is located nearby rather than one that is a greater distance away.

The development of the Graton facility in Rohnert Park, about 50 miles from the Bay Area's center of population, could have the effect of increasing the effective "distance" of River Rock and Twin Pines Casinos from their primary market area by about 25 miles, or 33 percent (25 miles divided 75 miles = .33). This is because the Graton facility will be located between River

⁵⁵ Press Democrat Staff. "Expansion Planned for Twin Pine Casino." *Press Democrat*. October 15, 2007.

⁵⁶ However, if the existing casinos expand, they should be better positioned to compete with the proposed Graton Rancheria. This analysis assumes that neither casino will expand in order to provide a conservative estimate of the competitive impacts.

⁵⁷ Cummings Associates. *Analysis of Current Markets for Casino Gaming in Iowa*. October, 2003.

Rock and Twin Pine and the large Bay Area population base, which represents both casinos' largest potential markets. Literally, Graton could replace River Rock as "The Bay Area's Closest Casino" and River Rock will simply be a casino that is located 75 miles from Bay Area.

If gaming revenue declines by 38 percent as the distance of a gaming attraction from a market area increases by 100 percent, then the effective 33 percent increase in distance of River Rock Casino from its primary market area corresponds to a 13 percent decline in gaming revenue for River Rock (.33 increase in distance x .38 revenue decline = .13). With annual gaming revenue of \$67.1 million, River Rock Casino would lose an estimated \$8.7 million per year if its revenue declines by 13 percent following the opening of the Graton Rancheria casino in Rohnert Park. For the alternative site at Lakeville Highway and Highway 37, the same approach would yield a 22 percent estimated decline in revenues for River Rock (alternative site is 43 miles closer, divided by 75 miles from River Rock to San Francisco = 57.3 percent change in effective distance X 38 percent decrease in revenues for every 100 percent increase in distance = 22 percent).

If the above analysis is duplicated for Twin Pine Casino, the opening of the Graton facility can be expected to cause Twin Pine Casino revenue to decline by 14 percent if the casino is built at the proposed site and by about 21 percent if the casino is built at the alternate site at Lakeville Highway and Highway 37. Because financial data are not available for Twin Pine Casino, it is not possible to quantify the potential revenue decline in a dollar amount. In addition, the impacts to both casinos from development at the Lakeville site could be larger than estimated, as that site is located along the path to both the River Rock and Twin Pine casinos. See Table 15 below for calculations.

Because the impacts to competing casinos are based on distance from population centers (i.e., the San Francisco and the Bay Area), rather than the size of the facility, the impacts to competition from the reduced intensity alternatives should not vary significantly from the full-scale casino alternatives.

Table 15: Financial Impacts of Distance from the Bay Area

	River Rock Casino		Twin Pine Casino		Willfred Site	Alternate Site
	Miles from Bay Area	75	Miles from Bay Area	79		
Change in Effective Distance to Market Effective Increase in Distance from Bay	Mi. Beyond Alternate Site	Mi. Beyond Alternate Site	Mi. Beyond Alternate Site	Mi. Beyond Alternate Site	50	32
Revenue Decline per 100% Increase in Distance	25	43	29	47	NA	NA
Revenue Impact From Effective Increase in Distance	33%	57%	37%	59%	NA	NA
	-38%	-38%	-38%	-38%	NA	NA
	-13%	-22%	-14%	-23%	NA	NA

Note:

Alternate Site is located at Lakeville Highway and Highway 37, northeast of Novato.

Sources: Analysis of Current Markets for Casino Gaming in Iowa, October 2003, Cummings Associates; BAE 2006

Potential for Market Saturation. The addition of approximately 2,000⁵⁸ gaming machines by the Graton Rancheria would increase the supply of casino slots in the Northern California market area by approximately 12 percent.⁵⁹ Holding population constant, the increase in the number of gaming machines in the Northern California market area from 17,308 to 19,308 would reduce the persons 21 and over per gaming machine from the current level of 488 to 437. See Table 16 below for calculations.

Initially, one would assume that increasing the number of slot machines relative to the population would have an adverse impact on revenues per machine, since there would be more competition for patrons. However, data assembled in Table 17 as well as information contained in a report on gambling behavior by Harrah's, Inc., indicates that the opposite is true. Table 17 is constructed of data from several sources, including data on the percentage of adults participating in casino gambling and the average number of visits per year, by state, from the Harrah's report,⁶⁰ data on the number of gaming machines by state from Casino City Press,⁶¹ and estimates of population 21 and over, per state, from the U.S. Census. Table 17 does not include data for all U.S. states. Rather it omits states for which either the Harrah's survey or the Casino City Press data were not available. It also omits data for some clear outlier states, such as Nevada, which would tend to skew the results. In all, the table contains data for 29 states, including California.

What the data in the table show is that there is actually a negative relationship between the number of persons per gambling machine and both the casino gambling participation rate (see Figure 1) and the average number of visits per year, per person (see Figure 2). This means that as the supply of gaming devices in a state increases relative to its population, its residents are more likely to participate in casino gambling and the average number of casino visits per person will increase. Additionally, the data show that among all the states included in the sample, the average number of persons 21 and over per gambling machine is 276.

A comparison of the average persons per gaming machine benchmark presented above indicates that the Northern California market can be considered below average in saturation with casino gaming machines compared to the remaining 28 states when taken as a group. In addition, among individual states in the group, California ranks number 7 out of 29 in terms of the number of persons over 21 per slot machine.

With the current level of 488 persons per slot, the Northern California market has about 43 percent more persons per slot compared to the average of the states in the sample. Even though the addition of 2,000⁶² more slots at the Graton Rancheria, would increase the level of market

⁵⁸ This estimate of casino slot machines is for analysis purposes, and is based on the planned casino floor area. The actual number of slot machines that could be installed in the facility is to be determined and may vary from this number.

⁵⁹ Assuming that the existing casinos expand, the proposed Graton Rancheria's share of total slot machines would decrease. In order to provide a conservative analysis, this report assumes that neither casino will expand.

⁶⁰ Harrah's, Inc. Harrah's Survey '04 – Profile of the American Casino Gambler, 2004.

⁶¹ Casino City Press. 2004 Global Gaming Almanac, 2004.

⁶² This estimate of casino slot machines is for analysis purposes, and is based on the planned casino floor

saturation in Northern California, the region would still have 37 percent more persons per slot machines than the average of the states in the sample.

area. The actual number of slot machines that could be installed in the facility is to be determined and may vary from this number.

Table 16: Population per Slot Machine, Northern California

	<u>Total</u>
2004 Northern California Population 21 and Over (a)	8,444,299
Casino Gaming Machines (excluding Graton)	17,308
Population per Gaming Machine	488
Casino Gaming Machines (including Graton) (b)	19,308
Population per Slot Machine	437

Note:

(a) Includes the counties of Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Glenn, Humboldt, Lake, Lassen, Marin, Mendocino, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tuolumne, Yolo, and Yuba

(b) Number of slot machines including Graton involves an estimate of the number of gaming machines at Graton, based on the size of the casino floor.

Sources: State of California Dept. of Finance; Casino City Press, 2004; BAE 2006

Table 17: Number of Persons Per Gaming Machine (Saturation) and Average Casino Visits Per Capita

State	Casino Participation	Average Trips	2004 Gaming Machines	2004 Population	2004 Pop. 21 and Over	Persons 21+ Per Machine	Visits Per Person
AZ	41.0%	5.9	12,443	5,744,000	3,962,156	318	2.42
CA	38.0%	5.7	55,448	35,894,000	24,781,648	447	2.17
CO	34.0%	6	15,576	4,601,000	3,234,114	208	2.04
CT	40.0%	5.7	13,674	3,504,000	2,525,917	185	2.28
FL	17.0%	4.2	11,397	17,397,000	12,728,877	1,117	0.71
IA	26.0%	6.5	14,896	2,954,000	2,142,630	144	1.69
ID	25.0%	3	4,299	1,393,000	953,727	222	0.75
IL	28.0%	5.9	9,791	12,714,000	8,945,570	914	1.65
IN	22.0%	4.3	17,768	6,238,000	4,375,663	246	0.95
KS	26.0%	5.2	2,558	2,736,000	1,925,605	753	1.35
LA	39.0%	8.6	43,187	4,516,000	3,137,951	73	3.35
MI	32.0%	5.4	23,039	10,113,000	7,148,542	310	1.73
MN	34.0%	6.6	20,910	5,101,000	3,631,981	174	2.24
MO	30.0%	7.8	17,653	5,755,000	4,118,496	233	2.34
MS	35.0%	8.9	44,677	2,903,000	2,020,483	45	3.12
NC	8.0%	2.9	14,010	8,541,000	6,085,148	434	0.23
ND	31.0%	4.3	2,992	634,000	464,191	155	1.33
NJ	36.0%	5.6	43,096	8,699,000	6,208,834	144	2.02
NM	32.0%	7.1	14,429	1,903,000	1,320,323	92	2.27
NY	27.0%	3.9	16,125	19,227,000	13,885,820	861	1.05
OH	19.0%	3	4,000	11,459,000	8,196,399	2,049	0.57
OK	16.0%	3.4	23,507	3,524,000	2,503,751	107	0.54
OR	28.0%	4.3	5,981	3,595,000	2,595,621	434	1.20
RI	36.0%	6.2	3,341	1,081,000	793,718	238	2.23
SC	8.0%	3.1	670	4,198,000	2,998,287	4,475	0.25
SD	32.0%	5	12,946	771,000	542,537	42	1.60
WA	28.0%	5.5	16,905	6,204,000	446,049	26	1.54
WI	29.0%	6.2	15,006	5,509,000	3,953,994	263	1.80
WV	7.0%	3.6	15,959	1,815,000	1,359,899	85	0.25
Total			496,283	198,723,000	136,987,931	276	

Sources: Casino City Press, Global Gaming Almanac, 2004; Harrah's Survey '04, Profile of the American Casino Gambler, Harrah's, Inc., 2004; U.S. Census, Statistical Abstract of the United States, 2006; BAE, 2006

Figure 1: Inverse Relationship Between Persons 21+ Per Machine and Percent of Adults Participating in Casino Gambling

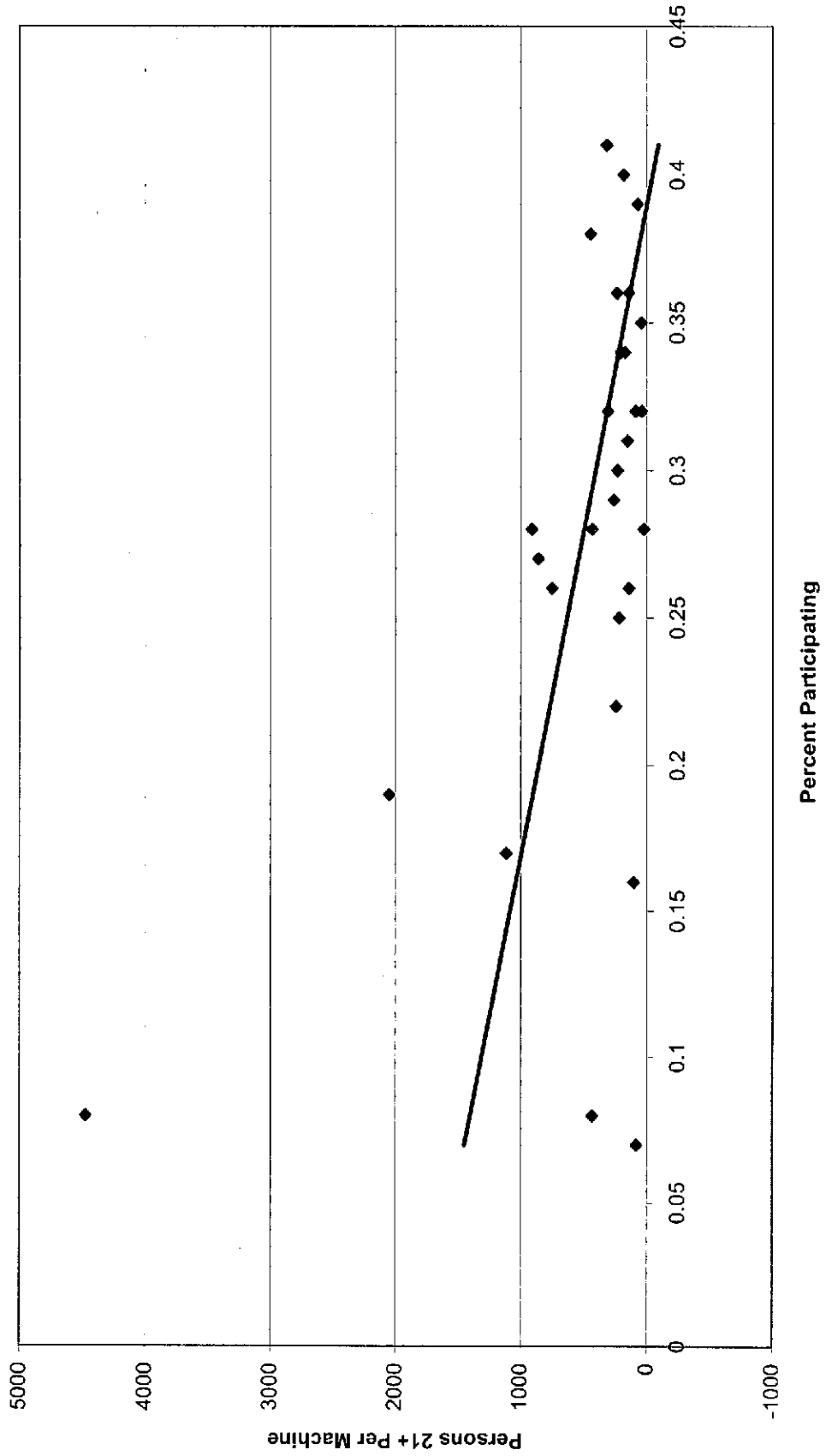
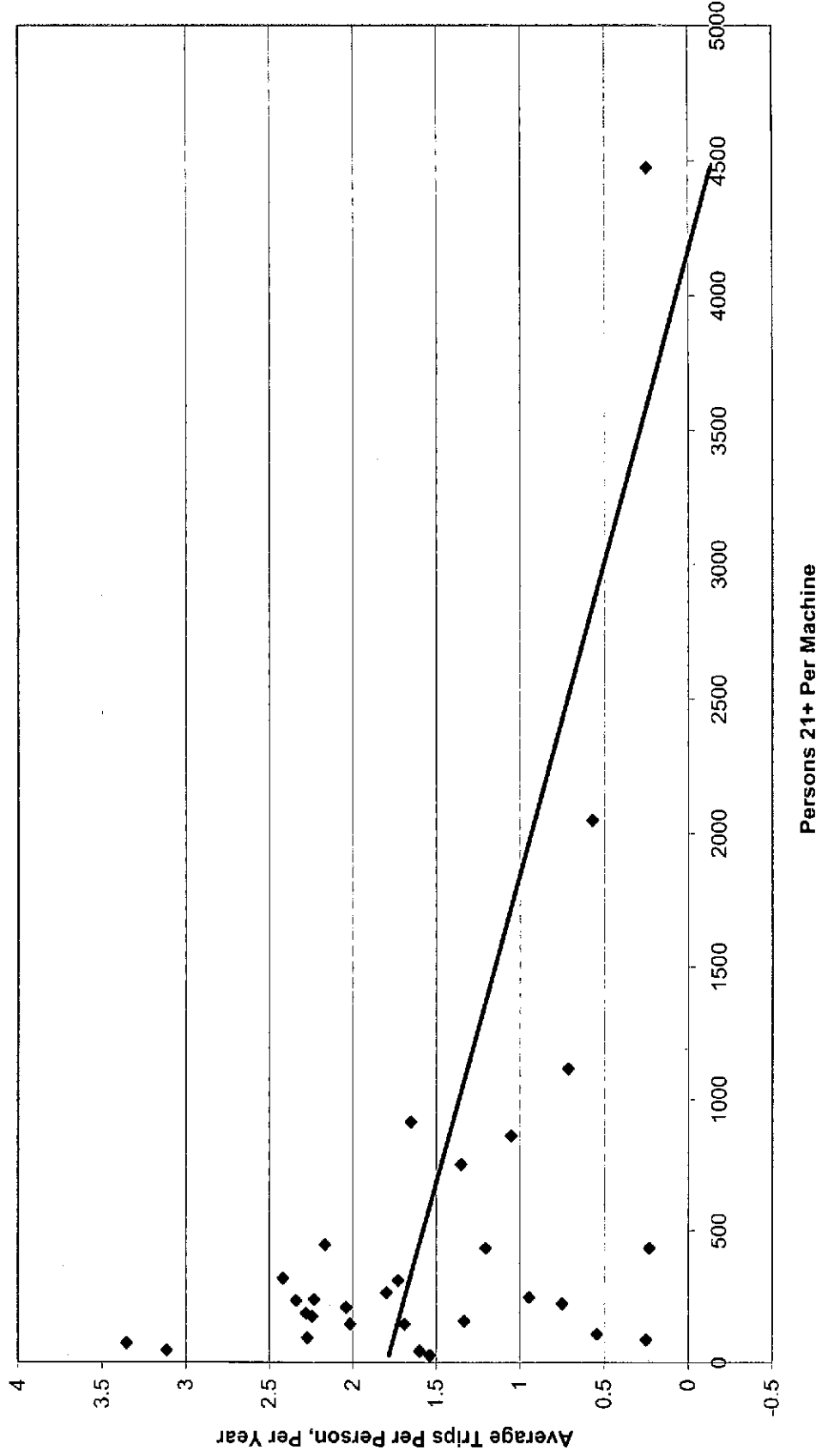


Figure 2: Inverse Relationship Between Number of Persons 21+ Per Machine and Average Gambling Trips Per Person



Effect of Increased Northern California Gaming Machine Count on Gaming Participation. As indicated above, an analysis of the gaming participation rates in other states in comparison to the number of persons 21 and over per gaming machine indicates that market saturation tends to increase participation in casino gaming for the population living within the states where casino availability (as indicated by the number of persons per slot machine) tends to be greater. While it is difficult to determine how much gaming participation will increase in a given market area with a given increase in gaming machines, we believe it is reasonable to assume that if the number of persons 21 and over per gaming machine in Northern California drops to 437 per machine with the development of the Graton Casino, casino gambling participation characteristics (participation rate and average trips per person) will at least increase to levels comparable to the State of California overall, where the number of persons per gaming machine is slightly higher, at 447.

Table 18 provides an estimate of the effect of this change in gambling expenditures as a result of increased market saturation, beginning with the 2004 population of the Northern California area, aged 21 and over. The table then estimates the casino gambling participation rate, based on the survey of gamblers performed by Harrah's. This produces an estimate of the number of casino patrons in the area. Then, multiplying this number with an estimate of the average number of casino trips per year yields a total number of casino trips. Then, the average amount spent per trip, from a survey completed by the American Gaming Association is used to estimate the total casino gaming expenditures. The amount spent on slot machines is estimated at 75 percent, per typical industry distribution of gaming revenues. Finally, the amount spent on slot machines is divided by the number of slot machines in the market in order to arrive at the estimated revenues per slot machine as an indicator of the potential health of the Northern California market.

The first column of Table 18 uses a set of assumptions that conforms to current Northern California gambling behavior. The second column uses a set of assumptions that assumes that by adding the additional machines at the Graton site, local gambling behavior will more closely resemble the norms for the state of California, in terms of an increased average number of trips per year and also a greater gambling participation rate. This increased gambling activity leads to a significant increase in average revenues per slot machine, from \$107 per day at present, to \$147 per day with the Graton facility. Thus, while the Graton facility would likely create some competitive impacts for River Rock and Twin Pine because the Graton facility would be closer to much of the Northern California market population than the two existing casinos, it should also have the effect of increasing the overall demand within the market.⁶³

Thus, if we assume that the proposed Graton casino would take away approximately 13 percent of the business from the existing River Rock Casino because of its greater proximity to trade area population, we would also expect that this would be mitigated to a great extent by the potential 38 percent increase in market area casino gambling expenditures that could occur as the trade area becomes more saturated with gaming machines. The same would be true of the Twin Pine

⁶³ Although competitive impacts should not vary significantly under the reduced intensity alternatives, as competitive impacts are based on location, rather than casino size, the demand increase in the overall market may be smaller under the reduced intensity alternatives, depending on the difference in the number of slot machines between the full casino alternatives and the reduced intensity alternatives.

casino, for which we estimated a 14 percent decline in business, based on current market area gambling behavior. Even in the case of the alternative casino location (Lakeville Site) the estimated 22 percent and 23 percent declines in business could be overshadowed by the estimated 38 percent increase in overall market area gambling expenditures.

Under a worst-case scenario, we could assume that our initial revenue losses from Table 15 would prevail and that market area gambling behavior would remain the same as it is today (i.e., Base Scenario from Table 18). We could then evaluate the effect the 13 and 14 percent estimated decreases in revenues at River Rock and Twin Pine might have on their economic viability.

It is difficult to ascertain the level of revenues below which a casino is not economically viable and therefore at risk of closure. The gaming industry performance in the City of Deadwood, South Dakota does provide some indication of the threshold of casino profitability. According to the South Dakota Commission on Gaming Annual Report for Fiscal Year '04, the Deadwood market included approximately 22 gaming operations that operated 2,943 slot machines. On average, the gross revenues were \$62.17 in daily revenue per machine. The Annual Report indicated that only forty seven percent of these establishments reported net income for Fiscal Year '04, down from 50 percent in the prior year. As a group, the Deadwood establishments reported a net operating loss of about \$882,000 for calendar year 2003, equal to about 1.25 percent of gross revenues. Given this relatively small loss, the current level of gross revenues per machine can be estimated as an approximation of the break-even point for these facilities. Although there are likely many differences in operating costs and other factors affecting profitability in the Deadwood market versus the Northern California market, this data suggests that if the average revenues per slot machine in casinos such as River Rock or Twin Pine drop to levels such as those reported in Deadwood, this should be taken as a warning sign that could precede downsizing of operations or potential closures. Based on our estimate of approximately 13 percent revenue decline for River Rock and the casino's reported \$103 per day in slot machine revenues, we do not expect that the proposed Graton casino would divert sufficient revenues from River Rock to make it economically non-viable; however, profitability would be reduced. Even with the estimated 22 percent loss of revenues if the Graton casino were built at the alternative location (Lakeville Site), the loss of revenues would not be enough to push the daily revenues per machine below the Deadwood profitability threshold. Because we do not know the current sales volume for Twin Pines, we cannot speculate on whether its revenue levels would be reduced below a level of profitability; however, given that it is likely not performing as well as River Rock on an average revenue per machine basis, the impacts of the proposed Graton casino would likely push it closer to the point where it will not be profitable as it currently operates. If its operating results deteriorate to a level where its current operations are not profitable, the casino may face a number of different options, including restructuring so that it can remain profitable while capturing a smaller share of the available demand, establishing a new strategy in order to mitigate the impact of competition and better compete to maintain and/or expand its share of available demand, or closing entirely. As Twin Pine is currently planning a modest expansion that would include a hotel to attract overnight patrons, it could be better positioned to compete with the proposed Graton Rancheria and increase its likelihood of reaching the minimum casino profitability threshold.

Conclusion. We identified a very conservative scenario (i.e., full impacts due to new competition

and no credit for increased gambling due to greater availability of gaming machines) and it does not appear that this would push River Rock or an expanded Twin Pine to a level of revenues that would lead to un-profitability. Additionally, while we have analyzed data that suggest that under current conditions, revenue declines might be as much as 23 percent (for Twin Pines Casino with Graton casino at the Lakeville Site), we have also analyzed data that suggest the potential increase in market area gambling expenditure support per gaming machine (after the Graton machines are added to the market) might be as much as 38 percent. Based on this information, we believe the net effect of the combination of a tendency for the proposed casino to capture some patrons who previously went to the existing casinos, but for the increased casino availability to expand the market area casino participation rate and frequency of visits will be to allow the existing casinos to remain viable by capturing a somewhat smaller share of a substantially increasing market.

Table 18: Potential Casino Market Size and Average Revenues Per Slot Machine

	8,444,299	
	Base Scenario	Improved Scenario
Northern CA Population 21 and Over (2004)		
Casino Participation Rate	33% (a)	38% (b)
Casino Patrons	2,786,619	3,208,834
Average Trips/Year	3.7 (c)	5.7 (d)
Total Trips/Year	10,310,489	15,883,726
\$ Spent Per Trip	\$87	\$87
Total Casino Spending/Year	\$898,742,051	\$1,384,548,565
% Spent on Slots	75%	75%
\$ Spent on Slots	\$674,056,538	\$1,038,411,424
Number of Slot Machines in N. CA (without Graton)	17,308	17,308
Number of Slot Machines in N. CA (with Graton) (e)	19,308	19,308
Average Revenue Per Slot (Without Graton)	\$38,945	
Average Revenue Per Day	\$107	
Average Revenue Per Slot (With Graton)		\$53,781
Average Revenue Per Day		\$147
Potential Increase In average Revenues Per Machine Per Day		38%

Notes:

- (a) San Francisco/Oakland/Santa Rosa designated market area participation rate.
- (b) California average casino participation rate.
- (c) San Francisco/Oakland/Santa Rosa designated market area average per gambler.
- (d) California statewide average per gambler.
- (e) Number of slot machines represents an estimate given the size of the casino floor.

Sources: Harrah's Survey '04, Profile of the American Casino Gambler; 2004 State of the States: The AGA Survey of Casino Entertainment; State of California, Department of Finance, 2004; Casino Gambling in America and Its Economic Impacts, U.S. Federal Reserve, St. Louis, 2003; BAE, 2006

Potential Cumulative Market Impacts

In addition to the proposed project, there are a number of other proposed casino projects within the northern California market. Among others, this includes proposals for casinos in Pt. Molate (western Contra Costa County near the City of Richmond), Richmond, and Oakland. It is impossible to state at this time, which, if any, of the projects would ultimately be approved and developed, thus, it is not possible to estimate the cumulative impact of the proposed project plus the other casino proposals that have been discussed. From the analysis presented above regarding the potential impact of the proposed project on the northern California casino market, it would appear that the addition of significant new gaming facilities in addition to the proposed project could actually contribute to an increase in the overall average revenues per day for gaming machines in the Northern California casino market as a whole.

In addition, the experience of the Las Vegas gaming market has certainly shown that as more and more gaming facilities are added to a market, it gains a critical mass that becomes capable of attracting substantial market support from visitors from outside the region. Albeit, Northern California's casinos will be much more geographically spread out than those in Las Vegas and they will not collectively function as a single destination the way Las Vegas' casinos do. However, aside from the casinos, northern California also has many other world class tourist attractions that draw visitors to the area and there is potential for synergy between the casinos and these other tourist attractions to help grow the overall northern California market for tourism. To the extent that tourists can be attracted to provide market support for the casinos, the potential market support will be greater than what is indicated in Table 18, which assumes that the Northern California casinos will be primarily serving the population residing within the northern California market area.

As indicated in the discussion relating to Table 16, the average number of persons 21 and over per gaming machine in Northern California would be 437 with the addition of 2,000 machines at Graton, while the average number of persons per machine in the sample of 29 states shown in Table 17 is 276. The number of additional machines that would be required beyond those estimated for the Graton facility for the Northern California market to reach a market saturation that is comparable to the average for the sample is 11,287 machines.⁶⁴

Thus, it would require more than a 75 percent increase from the current number of gaming machines to bring Northern California on par with the average saturation in the sample shown in Table 17. At the same time, such a large increase in gaming facilities would bring a potential opportunity for the region to build on its draw as a tourist attraction, which can generate additional revenue potential for the gaming operations beyond that which is projected in this study, based on resident populations.

⁶⁴ Assuming that the reduced intensity alternatives result in fewer slot machines, Northern California would require more than 11,287 additional slot machines to reach market saturation.

Social Impacts

BAE surveyed five communities that have Indian gaming casinos within close proximity or in their jurisdiction. For the survey, BAE contacted the local law enforcement offices and spoke with representatives to inquire about the impacts of the casinos and whether the facilities induced a higher incidence of crime. In addition, BAE reviewed crime statistics to find any correlation between the presence of casinos and higher than average crime rates. BAE contacted local social service agencies to document any increase in social service demand since the opening of the casinos. Finally, this analysis includes a brief literature review on the topic of the social impacts of casino gambling and summarizes the general conclusions from the information published to date.

Casino Communities Surveyed. BAE identified five communities in California with casinos that are similar in magnitude to the proposed casino. These included:

- Thunder Valley Casino adjacent to Lincoln, in unincorporated Placer County
- Chumash Casino Resort in Santa Ynez, Santa Barbara County
- Pala Casino Resort and Spa, in Pala, San Diego County
- Spa Resort Casino in Palm Springs, Riverside County
- Barona Valley Ranch Resort and Casino in Lakeside, San Diego County

With the exception of the Spa Resort Casino, each casino offers 2,000 or more slot machines. (The Spa Resort, with 1,000 slot machines is more comparable in size to a reduced intensity casino alternative). Table 19 summarizes the year in which each casino opened, square footage of the casino, number of slot machines, number of gaming tables, number of hotel rooms and the city population.

Although none of these casinos are directly comparable to the proposed Graton facility, each of the casinos listed above offer slot machines, gaming tables and, with the exception of Thunder Valley Casino, hotel accommodations. Furthermore, with the exception of the Pala Casino Resort and Spa, which opened in 2001, each of these casinos has been in operation since 2003, providing time for the observation of their impacts on their communities. Thunder Valley because is most comparable to the proposed Graton facility in terms of local population base and proximity to a larger metropolitan area. Where available, BAE collected information on crime impacts for this range of casinos in order to assess any trends in crime and the crime rate in the casino communities. Although this sampling does not include casinos and card clubs that are located in the Bay Area, based on the experience collecting information from this sample of casino communities, the inclusion of additional casinos would not likely generate better information, as communities do not seem to have the resources or inclination to track crimes systematically in a way that would make it possible to clearly attribute impacts to local casinos. Following is a discussion of the findings of the casino community law enforcement surveys. Surveying communities with casinos that have been open for several years potentially allows local authorities to track the impacts of the casinos over time.

Crime Rates

Any development that increases the number of persons traveling through Rohnert Park will

generate additional demand for police and public safety services. Likewise, such development would likely lead to some increase in crime, since the number of crimes tends to increase with service population. In addition, the casino may generate additional crimes from opportunists, and problem and pathological gamblers. The types of crimes may vary depending on the type of development (i.e. casino, business park, etc.). The next two sections analyze the potential changes in crime rates from the development of the proposed casino, or business park alternative at the Wilfred Site.

Crime Rates for Casino Alternatives. BAE contacted the local law enforcement agency that responds to calls made by the casinos in the survey communities. In general, each department reported an increase in law enforcement service demand as a direct result of the opening of each casino. All reported the typical crimes and/or calls for service that have increased are, but not limited to: driving under the influence, personal robbery, credit card fraud, auto thefts, disorderly conduct and assault. Although instances of these crimes have increased in all of the casino communities, no department could implicate the casino as the direct cause of the increase in crime. Rather, each department expressed that the increased concentration of people within the local area led to the increase in crime.⁶⁵ Three of the five casinos provided BAE with statistical reports on the number of crimes specifically in and around the individual casinos. As summarized in Table 20, the total number of crimes is minimal in comparison to the overall number of crimes in the surrounding communities. Chumash Casino in Santa Ynez had 204 calls for service in 2003, 20 of which were larceny-theft arrests, and one which resulted in a violent crime arrest. Pala Casino Resort and Spa in Pala, California had 181 calls for service in 2003, 21 of which were property crime arrests, 12 of which were larceny-theft arrests, and six of which resulted in violent crime arrests. All departments reported the largest impact directly attributed to the casino in their community is the increase in traffic and traffic related accidents. Appendix F provides a list of the law enforcement officials contacted, the survey questions asked, and a summary of the responses.

In addition to the interviews with local law enforcement officials, BAE also compiled uniform crime reporting statistics for the different host communities published by the State Attorney General's Office. Depending on whether a casino is located in an unincorporated area or in a city, BAE collected the crime data for the local jurisdiction in which each is located. BAE also collected the crime data for the overall county in which the casino is located. Combining this information with population figures for each area, BAE was able to calculate per capita crime rates for each. These data are incorporated into Table 20 and show that crime rates in Lincoln, the City adjacent to the Thunder Valley Casino are very similar to the rates in Placer County overall. Crime rates in unincorporated Santa Barbara County, where the Chumash Casino Resort is located are slightly below the County average. Crime rates in the unincorporated portion of Riverside County, where the Pala Casino Resort and Spa are located are substantially below the crime rates in Riverside County overall. Crime rates in Palm Springs, where the Spa Resort and Casino is located are substantially higher than in the Riverside County overall. Crime rates in unincorporated San Diego County, where the Barona Valley Ranch Resort and Spa is located, are

⁶⁵ As the reduced intensity alternatives would likely result in a smaller concentration of patrons, crime would likely be lower under these alternatives. However, there is no way to accurately quantify the difference in crime between the reduced intensity and full casino alternatives.

significantly below the crime rates in the county overall. With three local jurisdictions experiencing lower crime rates, one experiencing comparable crime rates, and one jurisdiction experiencing greater crime rates, these data can neither prove nor disprove theories about the link between crime rates and the presence of casinos.

Finally, BAE reviewed Rohnert Park Department of Public Safety, Sergeant Arthur Sweeney's study of the impacts to crime from the Thunder Valley casino.⁶⁶ Sergeant Sweeney analyzed the number and types of offenses reported near the Thunder Valley casino, and spoke with Placer County Sheriff Department Sergeant, Brian Whigham to extrapolate the actual impacts of casino operations on local crime. Sergeant Whigham indicated that one unintended consequence of the casino was that because the casino monitored its premises with video technology, the number of required detective follow-ups to reports of crime was much higher than would otherwise occur. Video technology enables the casino to provide video evidence implicating a perpetrator to the local authorities. Thus, local law enforcement officials would have sufficient evidence to pursue a purse-snatcher or car thief after the crime occurred.⁶⁷ While this is clearly a benefit to the community, such follow-ups require additional resources.⁶⁸ The Sergeant also indicated that the rate of growth in Placer County, and particularly around Lincoln, where the casino is located, generated more service demand than the casino, and that the casino mainly generated the types of calls that would occur in tandem with the opening of a tourist attraction.⁶⁹

In order to estimate the potential increase in service demand from the casino, Sergeant Sweeney examined the changes in per capita crime rates between the period 18 months prior to the casino's opening, and 18 months after the casino's opening, and finds that the average number of monthly reports did increase per capita for all types of crime, with the largest increases (43 percent) in drug related arrests on casino routes, and (21 percent) in property crimes that occur in already-developed residential and industrial neighborhoods near casino routes.⁷⁰ Table 21 shows the per capita change in average monthly reports, by type of crime.

Sergeant Sweeney's analysis focused on the areas adjacent to the casino, and looked at raw data to determine the potential impacts of the casino. However, one cannot determine with certainty the impacts of casino operation on local crime rates without accounting for crime that occurs within a community, but away from the casino site, and utilizing statistical inference analysis that accounts for other community characteristics that are related to the incidence of crime. In order to determine the actual nature of the relationship between crime rates and the presence of a casino, we defer to a review of the literature on the link between crime and casinos.

Crime Rates for Business Park Alternative. Should the business park alternative be developed, there is likely to be a "moderate"⁷¹ increase in crime for Rohnert Park or Sonoma County. BAE

⁶⁶ Sweeney, Arthur. "Rohnert Park Department of Public Safety Inter-Office Memorandum: Thunder Valley Casino Trip." February, 2006.

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Ted Geisige, Commander, City of Rohnert Park Police Department, e-mail, February 1, 2006.

contacted the Rohnert Park Police Commander to determine what types of crimes are most likely to occur on a business park site. According to the Commander, the alternative business park could result in increases in the following types of crimes: traffic collisions, business and vehicle burglaries (mostly at night), thefts from vehicles/businesses, nighttime prowlers and suspicious persons, fraud and embezzlement, and graffiti/vandalism. Due to the site's location, west of the highway, the Commander anticipates requiring an increase in staffing and the establishment of a new "beat" to serve the area. However, the types and amounts of crimes likely to occur would depend greatly on the types of businesses that would occupy the alternative business park.

Crime Rates for No Action Alternative. Under the No Action alternative, there would be 151,000 square feet of retail space, along with 229 single-family residential units, and 266 multifamily rental units. According to the Rohnert Park Police Department,⁷² the additional service demand that the retail space would generate would vary by the types of retail that would occupy the space. However, a development of this size would likely result in a "moderate" increase in crime for Rohnert Park.⁷³ Increased service demands likely to be associated with the retail portion of the development would be similar to those listed for the business park alternative, but would also include daytime burglaries, needs for Business Watch meetings, false alarms (police and fire), annual fire inspections, hazardous materials issues, and EMS calls. The residential portion of the development would also generate additional service demand for similar crimes as well as from juvenile complaints/problems, vehicle abatements, civil matters, domestic violence calls, and neighborhood crime prevention meetings. For this development, the majority of service demands would come from the retail and multifamily components, with single-family residential units generating the least amount of additional service demand.⁷⁴

Social Service Demand

BAE conducted interviews with the county social service departments in each individual case study casino jurisdiction. Generally, each of the five counties contacted has seen a minimal increase in social service demand in their community as a result of the casino. Specific types of demand universally felt by all social service departments are substance abuse assistance. The increase in need for assistance is primarily related to, but not limited to, alcohol abuse, narcotic abuse, and problem gambling. Three of the five social service departments have seen an increase in the divorce rate, but do not necessarily attribute this to the casino. None of the county social service departments contacted directly attributes the minimal increase in demand for their services to the casino in their communities. However, since many factors contribute to the incidence of divorce, alcoholism, and other social ailments in a given community that could preclude county staff from attributing these social ailments to the casino, we defer to a review of existing literature that examines the linkages between social ailments and the presence of a casino. Appendix G provides a list of the social service providers contacted, the survey questions asked, and a summary of the responses.

Literature Review of Social Impacts of Casino Gambling

This portion of the study provides a general review of the literature concerning the social impacts

⁷² Ted Geisige, Commander, City of Rohnert Park Police Department, e-mail, May 24, 2006.

⁷³ Ibid.

⁷⁴ Ibid.

of casino gambling. There is some dispute as to whether the overall impacts of casinos are positive or negative, as social impacts are relatively difficult to measure. The following review provides a brief description of the positive and negative social impacts of casino gambling on local communities.

Crime Rates. As with our own survey and data review, there is currently no agreement in the literature as to whether casino gambling increases or decreases local crime rates. The National Opinion Research Council (NORC) found that insufficient data exists to quantify or determine the relationship between casino gambling within a community and crime rates⁷⁵. The lack of data coupled with mis-specified models tends to dominate the literature on this subject, making consensus on the issue unattainable. Casino proponents argue that there is an incentive for casino operators to support local law enforcement and encourage law-abiding behavior around their premises,⁷⁶ while opponents argue that casinos lead to increased incidence of crime among pathological and problem gamblers.⁷⁷ Several studies found that the increase in crime within an area after the opening of a new casino was not much different than from the opening of any other type of tourist attraction⁷⁸. However, such results may evolve from model specifications, rather than the data. Finally, most studies tend to be sponsored either by casino opponents or proponents, limiting the reliability of much of the literature.

In their 2004 *Casinos, Crime, and Community Costs* study that was published in the "Journal of Economic Literature," Grinols and Mustard develop a comprehensive model specification for crime impacts of casinos, and find that the addition of a casino to a non-casino community does generate additional crime. The model examines the differences in numbers of crimes over time between counties containing an operating casino versus those without a casino, for all counties in the nation. Their model accounts for over 45 population and location characteristics that could be related to crime. This specification allows the authors to get a clearer picture of the impacts of the addition of a casino on local crime rates. Next, their model specifies types of crime into seven categories: aggravated assault, rape, larceny, burglary, robbery, auto thefts, and murder. Finally, the authors include time variables to account for the expected decrease in crime that additional jobs would create when the casino opens, and allow them to examine the crime impacts of pathological gamblers.

The time element of the specification allows for the distinction between crimes of opportunity and those from problem and pathological gamblers, and shows which crimes fall into each of these two categories. Following are discussions on the impacts to crimes of opportunity and crimes from problem and pathological gamblers. Table 22 presents the results of Grinols and Mustard's analysis.

⁷⁵ Rose, Adam. "The Regional Economic Impacts of Casino Gambling: Assessment of the Literature and Establishment of a Research Agenda."

⁷⁶ Ibid.

⁷⁷ National Gambling Impact Study Commission. "Chapter 7: Gambling's Impacts on People and Places." 1999. p 7-13.

⁷⁸ Rose, Adam. "The Regional Economic Impacts of Casino Gambling: Assessment of the Literature and Establishment of a Research Agenda."

Crimes of Opportunity. Crimes of opportunity refer to the types of crime that generally follow the opening of tourist attractions. These types of crimes generally include car thefts but could also include some robbery and fraud as well. According to Grinols and Mustard, auto thefts increase by approximately 153 incidents per 100,000 population in the first year of casino operations and robberies increase by approximately 11 incidents per 100,000 population, and both continue to increase steadily in each subsequent year of operations.⁷⁹ Although the increase in the visitor population from the attraction would present the opportunity for more auto thefts, casinos tend to have security cameras in their parking lots, which would deter some auto thefts to the extent that the criminal population knows that the cameras are filming the parking lot. Over time, some of the increase in auto thefts may also be related to problem and pathological gamblers.

Crimes from Problem and Pathological Gamblers. Problem and pathological gamblers are persons who gamble compulsively and whose relationships and lives often suffer as a result of their gambling habits. According to Breen and Zimmerman's 2003 study: *Rapid Onset of Pathological Gambling in Machine Gamblers*, it takes between one and 3.5 years for a person to develop into a pathological gambler, become desperate, and exhaust his or her resources.⁸⁰ The 2006 *Gambling in the Golden State: 1998 Forward* report states that in a survey of recovering pathological gamblers roughly 29 percent admitted to committing criminal offenses.⁸¹ As it takes time for a person to develop a gambling problem, the impacts of pathological gamblers on crime would not manifest until two or three years after the opening of the casino.⁸² Grinols and Mustard account for this delayed impact with variables that examine the impacts of the casino in the third, fourth, and fifth years of operations. They find that casinos do indeed generate additional cases of assault, larceny,⁸³ robbery, rape, and auto thefts, and that all of these crimes increase over time.⁸⁴ Of these crimes, auto thefts, robberies, and assaults increased the most in year three, while larcenies and burglaries increased the most in year five.⁸⁵ In year three, an operating casino led to an increase in the larceny rate by four instances per 100,000 residents; however, in year five, the larceny rate was up 615 instances per 100,000 residents.⁸⁶ In year three the presence of a casino led to no change in the instance of burglaries on a community; however, in year five, the burglary rate was increased by 325 instances per 100,000 residents.⁸⁷ Thus, the data show that the presence of a casino leads to an increase in crimes that lag the casino's

⁷⁹ Grinols, Earl L. and D. Mustard. "Casinos, Crime, and Community Costs," *Journal of Economic Literature*. September, 2004.

⁸⁰ Breen, R.B. and M. Zimmerman. "Rapid Onset of Pathological Gambling in Machine Gamblers," *Journal of Gambling Studies*. 2002

⁸¹ Simmons, Charlene Wear, "Gambling in the Golden State: 1998 Forward." *California Research Bureau*. May, 2006

⁸² Grinols, Earl L. and D. Mustard. "Casinos, Crime, and Community Costs," *Journal of Economic Literature*. September, 2004.

⁸³ So called "white-collar" crimes, such as embezzlement are categorized as larcenies.

⁸⁴ Grinols, Earl L. and D. Mustard. "Casinos, Crime, and Community Costs," *Journal of Economic Literature*. September, 2004.

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ Ibid.

opening. Given the lag, and the nature of the crimes, it is likely that problem and pathological gamblers make up a significant portion of these perpetrators. Interestingly, Grinols and Mustard find that these increases in crime rates do not seem to plateau over time, but keep increasing over time.⁸⁸ Since the study focuses on communities with no casino presence prior to the opening of a casino, and Sonoma County already has one casino, with a second located nearby in Lake County, these impacts are likely overstated as residents with the propensity to gamble and develop gambling problems are likely to currently visit one of the area's existing casinos. Thus, the increase in crime from an additional casino is likely to be less dramatic than Grinols and Mustard find.

As part of their analysis, Grinols and Mustard estimate that the total annual countywide social costs of having an operating casino within the county, cost per victimization figures from the 1996 National Institute of Justice's "Victim's Costs and Consequences: A New Look" analysis. Using these cost per victim estimates, Grinols and Mustard estimate that the presence of a casino, either in a city or an unincorporated area, are approximately \$75⁸⁹ per adult county resident.⁹⁰ Approximately \$30, or 40 percent of the total social costs are related to police, judicial services, and theft,⁹¹ including the cost of both crimes of opportunity and crimes from problem and pathological gamblers. Applying this methodology to the population of adults over the age of 17 in the unincorporated county and all cities within ten miles of the casino alternative sites⁹² yields a total cost estimate of approximately \$8.3 million for the Wilfred and Stony Point alternatives, and \$4.8 million for the Lakeville alternative.⁹³ Although the authors use this methodology for estimating crime costs, there is no consensus in the literature on how to measure these costs, and the topic is hotly debated. In addition, it should be noted that of all of the studies that analyze the crime impacts from casinos, this is the only one that estimates a cost associated with these crimes. Some of the literature suggests that additional casino crime is related to an increased population concentration, not unlike the opening of a mall or amusement park.⁹⁴ According to *Gambling in the Golden State: 1998 Forward*, Counties and Tribes typically negotiate law enforcement contributions averaging \$700,000 annually to mitigate crime impacts.⁹⁵ Under the MOU, the Tribe agrees to pay the City of Rohnert Park \$500,000 per year to combat crime.⁹⁶ According to Rohnert Park's Sergeant Sweeney, this should sufficiently mitigate any law enforcement impacts

⁸⁸ Ibid.

⁸⁹ In 2003 dollars.

⁹⁰ Grinols, Earl L. and D. Mustard. "Casinos, Crime, and Community Costs," *Journal of Economic Literature*. September, 2004.

⁹¹ Ibid.

⁹² Analysis uses a ten mile radius to estimate the impacts from new problem and pathological gamblers. Should crime rates be increased, the effects are expected primarily within this area. See Problem and Pathological Gambler section for rationale.

⁹³ Estimate does not include costs to Rohnert Park because the City and Tribe have already agreed to mitigation terms per the 2003 MOU.

⁹⁴ Rose, Adam. "The Regional Economic Impacts of Casino Gambling: Assessment of the Literature and Establishment of a Research Agenda."

⁹⁵ Simmons, Charlene W. "Gambling in the Golden State: 1998 Forward," *California Research Bureau, California State Library*. May 2006.

⁹⁶ MOU, 2003.

to the City. Since there are already two casinos located within the area, the additional impacts from the proposed Graton Rancheria would not likely increase crime as dramatically as Grinols and Mustard find for communities that do not have an existing casino.

The lack of consensus among the various articles makes estimating the proper mitigation requirements of increased crime difficult. However, the fiscal analysis estimates that annual increased law enforcement services in the unincorporated County will cost the County between \$241,800 and \$285,800, depending on the number of employees.⁹⁷ This represents the minimum mitigation that the Tribe should pay the County, in addition to the \$500,000 annual contribution that the Tribe would pay the City of Rohnert Park. According to the literature, on average, California Tribes pay \$700,000 annually to mitigate law enforcement impacts from casinos. However, the average tribal casino is smaller than the proposed Graton Rancheria alternatives. The Tribe should negotiate with the County and neighboring cities within ten miles to mitigate crime impacts, with the total amount negotiated falling between the average MOU payment of \$700,000 to the County and cities within ten miles (in addition to the \$500,000 already slated for the City of Rohnert Park, which should be most directly impacted by any increase in crime) and a maximum total payment of \$8.3 million, to be distributed between the County and neighboring cities, except Rohnert Park, based on the population distribution. Table 23 shows the population and maximum crime cost distributions.

Problem and Pathological Gambling. Like other social impacts, the causal relationship between casinos and problem gambling is difficult to measure. Although only 30 states allow for legal forms of casino gambling, all but Hawaii and Utah allow for some type of legal gambling⁹⁸. Thus, problem gamblers are likely to exist in most communities. In addition, the United States General Accounting Office (GAO) found that pathological and problem gambling is likely to coincide with other addictions and disorders, including alcohol and drug abuse, such that the increased crime can not solely be attributed to the gambling behavior, but occurs in conjunction with other addiction disorders⁹⁹. However, there are several existing studies that attempt to measure the difference in the percentage of problem and pathological gamblers in casino communities from those in the general population. According to Grinols and Mustard, the Las Vegas community has a problem and pathological gambler population that is nearly six percent higher than in a non-casino community.¹⁰⁰ Ricardo Gazel finds in his *Economic Impacts of Casino Gambling at the State and Local Level* article, that the incidence of problem and pathological gamblers can be between one to four percent higher in a casino community than for the general population, depending on the type of gambling that's prevalent.¹⁰¹ He finds that communities with a higher percentage of slot machines have a higher problem and pathological

⁹⁷ Equals 38 percent of total service costs. See Fiscal Analysis.

⁹⁸ United States General Accounting Office. "Impact of Gambling: Economic Effects More Measurable than Social Effects." April, 2000.

⁹⁹ Ibid.

¹⁰⁰ Grinols, Earl L. and D. Mustard. "Casinos, Crime, and Community Costs," *Journal of Economic Literature*. September, 2004.

¹⁰¹ Gazel, Ricardo. "The Economic Impacts of Casino Gambling at the State and Local Level." *Annals, AAPSS*, 556, March 1998.

gambler differential than in areas with other types of gambling.¹⁰² Several studies suggest that these population differentials take effect for residents within a 50 mile radius of a casino, and increase to the above mentioned rates as the casino moves closer to the population.¹⁰³¹⁰⁴ According to Welte et al., the probability of being a problem or pathological gambler increases by approximately 100 percent for those persons living within ten miles of a casino.¹⁰⁵ At the national level, approximately four percent of the adult population are problem or pathological gamblers.¹⁰⁶ In 2003, there were approximately 32,288 residents over the age of 16 in Rohnert Park. Applying national problem and pathological incidence rates to the adult population suggests that in 2003, approximately 1,290 residents were problem or pathological gamblers. Thus, the casino would roughly double the number of problem and pathological gamblers in the City, resulting in a net increase of approximately 1,290 new problem and pathological gamblers that live in Rohnert Park.¹⁰⁷ In addition, considering a potential doubling of the problem gambler population within the entire ten mile radius of the potential casino sites, there could be an additional 8,760 new problem and pathological gamblers located outside of Rohnert Park resulting from the Wilfred site alternative, or 1,740 new problem and pathological gamblers associated with the Lakeville casino alternative. Thus, the Wilfred site alternative could result in a net increase of 10,050 new problem and pathological gamblers, including those located within Rohnert Park. However, since Rohnert Park is located more than ten miles from the Lakeville site, Alternative F could result in a net increase of 1,740 new problem and pathological gamblers.

Although the literature states that the prevalence of problem and pathological gambling increases for all residents within 50 miles of a casino, no study estimates the rate of increase for those residents living between 11 and 50 miles of a casino. In addition, studies that estimate the increase in the problem and pathological gambling rates focus on increases in communities that do not have existing casinos. Since the existing River Rock and Twin Pine casinos are located within 50 miles of all Sonoma County residents, this analysis assumes that some of those residents would have already started gambling at one of the other local casinos. Thus, there will not be any additional problem and pathological gambling instances for those residents living more than ten miles from the casino alternatives. In addition, since those persons that would live within ten miles of the casino alternative sites are also within 50 miles of the other casinos, the addition of the Graton Rancheria would likely result in a less than 100 percent increase in the problem and pathological gambling rates. Thus, the analysis presents a relatively conservative estimate of new problem and pathological gamblers.

¹⁰² Ibid.

¹⁰³ Simmons, Charlene W. "Gambling in the Golden State: 1998 Forward," *California Research Bureau, California State Library*. May 2006.

¹⁰⁴ Welte, John W., William F. Wieczorek, Grace M. Barnes, Marie-Cecile Tidwell, and Joseph H. Hoffman. "The Relationship of Ecological and Geographic Factors to Gambling Behavior and Pathology." *Research Institute on Addictions*. September 19, 2003.

¹⁰⁵ Ibid.

¹⁰⁶ Simmons, Charlene W. "Gambling in the Golden State: 1998 Forward," *California Research Bureau, California State Library*. May 2006.

¹⁰⁷ As the probability of developing problem or pathological gambling problems is related to distance to a casino and not size of the casino, the impacts to problem and pathological gambling as well as related crimes and other social issues will not be significantly different under the reduced intensity alternatives.

Under the MOU, Tribe agrees to provide \$125,000 annually to a treatment and prevention organization for the purpose of funding problem and pathological gambling programs. According to the *Gambling in the Golden State: 1998 Forward* report, the California Council on Problem Gambling, which provides statewide treatment services, estimated that a typical six-week intensive treatment program would cost approximately \$2,800 before referring the recovering gambler to Gambler's Anonymous for free ongoing support.¹⁰⁸ A study for the State of Oregon titled *Gambling and Problem Gambling in Oregon: Report to the Oregon Gambling Addiction Treatment Foundation*, anticipates that approximately three percent of all statewide problem and pathological gamblers will seek treatment each year.¹⁰⁹ In addition, the State of Oregon, which was recognized for its innovative and effective problem and pathological gambling treatment and prevention programs, estimates that the annual cost of providing prevention and treatment programs is approximately \$828 per problem and pathological gambler that seeks treatment.^{110,111,112} The MOU specified payments allow for approximately \$3,200 annually per Rohnert Park problem and pathological gambler that seeks treatment.¹¹³ However, accounting for problem and pathological gamblers located within the entire ten-mile radius of the Wilfred site, yields an average MOU payment of \$413 per treatment seeker, which is less than the reasonable \$828 threshold per treatment seeker, based on the Oregon program. Thus, the MOU's specified payments to problem and pathological gambling programs may not be sufficient to provide prevention and treatment to problem and pathological gamblers and should be increased by \$415 per gambler seeking treatment, or \$125,100.¹¹⁴ Under the Lakeville alternative, treatment cost mitigation would require a payment of approximately \$43,200.

Again, it should be noted that the estimated numbers of additional problem and pathological

¹⁰⁸ Simmons, Charlene W. "Gambling in the Golden State: 1998 Forward," *California Research Bureau, California State Library*. May 2006.

¹⁰⁹ Volberg, Rachel A. "Gambling and Problem Gambling in Oregon: Report to the Oregon Gambling Addiction Treatment Foundation." 1997.

¹¹⁰ Hooper, David B. and Jeffrey Marotta. "State of Oregon Wins 'Government Award' from National Council on Problem Gambling: Oregon Lottery and Department of Human Services Receives National Award for Innovation and Achievements in Addressing Problem Gambling." June 24, 2002.

¹¹¹ Moore, T., Marotta, J. (2004). *Oregon Gambling Treatment Programs Evaluation Update, 2003*.

Salem, OR: Department of Human Services, Office of Mental Health and Addiction Services.

¹¹² The average cost per person that seeks treatment is approximately \$828 but the average cost per person that seeks *and completes* treatment is approximately \$1,685.

¹¹³ This number only includes Rohnert Park residents that are new problem and pathological gamblers. In addition, there will be some County residents that develop problem and pathological gambling problems. Thus, the payments per gambler seeking help are actually lower than \$3,200.

¹¹⁴ The Tribe will likely renegotiate its MOU payments for the reduced intensity casino alternative. However, the reduced intensity of the casino may not impact the incidence of new problem and pathological gamblers in the County. Under the current MOU, annual tribal payments for problem and pathological gambling programs are less than the recommended level of \$828 per gambler seeking treatment to support treatment and prevention programs. For the reduced intensity alternative, the Tribe should contribute a minimum of \$250,000 per year to support prevention and treatment programs for problem and pathological gamblers in Rohnert Park and elsewhere within ten miles of the Wilfred site.

gamblers may be somewhat overstated, due to the existence of two casinos within 50 miles of the Sonoma County population.

Problem and Pathological Gambling Among the Youth Population. As with the other social impacts of casino gambling, the literature diverges in its ability to determine whether the presence of a casino, or expanded gaming opportunities lead to an increase in young problem and pathological gamblers. According to Welte, et al., several studies 2002 studies find that adolescents do not have higher problem and pathological gambling rates than the general population.¹¹⁵ However, Marc Potenza, Thomas Kosten, and Bruce Rousaville find in their “Journal of the American Medical Association” (JAMA) article, that higher rates of problem and pathological gambling are observed in adolescents and young adults than in the general adult population, where problem and pathological gamblers account for an additional ten percent of younger persons than in the general population.¹¹⁶ While many of these young persons were gambling over the Internet, the passage of the Safe Port Act in October 2006 effectively outlawed Internet gambling by making it illegal for financial institutions to transfer money to Internet gambling sites. To the extent that the passage of the Safe Port Act does effectively end Internet gaming, the portion of youth problem and pathological gamblers may decrease. Evidence suggests that when gaming opportunities are diminished, the portion of problem and pathological gamblers decreases.¹¹⁷ To the extent that the proposed Graton casino will provide additional gaming opportunities for young people in the County and at Sonoma State University, there is likely to be an increase in the number of young problem and pathological gamblers in the County.

As part of the MOU between the Tribe and the City of Rohnert Park, the Tribe will provide \$125,000 per year to the City for the express purpose of funding programs to help problem gamblers. A new study conducted for the California Office of Problem Gambling finds that programs designed to prevent and treat the instance of problem gambling are effective in helping problem gamblers to overcome their illness.¹¹⁸ According to the study, there are several different programs that the State, casino proprietor, City or County, or Gambler’s families can undertake to bring awareness to problem gambling, or to offer treatment to problem gamblers. Of the types of programs identified in the analysis, helplines; problem gambling awareness campaigns; voluntary exclusions;¹¹⁹ and “responsible gaming” initiatives¹²⁰ emerge as the most effective. In addition, the casino should not allow underage persons to loiter on the gaming floor, and should provide education materials to Sonoma State University to reduce the risks to young people.

¹¹⁵ Welte, John W., William F. Wieczorek, Grace M. Barnes, Marie-Cecile Tidwell, and Joseph H. Hoffman. “The Relationship of Ecological and Geographic Factors to Gambling Behavior and Pathology.” *Research Institute on Addictions*. September 19, 2003.

¹¹⁶ Ibid.

¹¹⁷ Ibid.

¹¹⁸ Volberg, R.A., Rugle, L., Rosenthal, R.J. & Fong, T. (2004). “Situational Assessment of Problem Gambling Services in California.” Sacramento, CA: Office of Problem Gambling, California Department of Alcohol and Drug Programs.

¹¹⁹ Family members of problem gamblers ask the casino to ban the problem gambler from the premises.

¹²⁰ Casinos educate employees to recognize signs of problem gamblers, provide employees with company policies for directing those seeking help, and provide on-site information for those seeking help.

Bankruptcy. Because bankruptcies are economic in nature, there is a great deal of data that provide evidence that problem and pathological gamblers have higher instances of bankruptcies than the general population. Both anecdotal and properly specified regression analyses concur that communities with casinos tend to have higher bankruptcy rates than non-casino communities. According to John Barron, Michael Staten, and Stephanie Wilshusen's 2002 article, "The Impacts of Casinos on Personal Bankruptcy Filing Rates," there is a direct correlation between the volume of casino gambling and bankruptcy filing rates.¹²¹ In addition, they generate a national model of 298 counties to find that on average, counties with casinos have an 18 percent higher bankruptcy filing rate than counties without casinos.¹²² In their study of "The Social and Economic Impact of Native American Casinos," William Evans and Julie Topoleski find that 4.5 years after a casino opens, the bankruptcy rate in the county has increased by ten percent.¹²³ However, Charlene Simmons finds in her "Gambling in the Golden State: 1998 Forward" article that the relationship between casinos and bankruptcy is not related to the casino's location, but to the higher rate of problem and pathological gamblers who are more likely to file for bankruptcy than the general population.¹²⁴ In order to mitigate the potential increase in bankruptcies, the Tribe should prominently display materials in addition to and providing MOU specified resources to local programs for education¹²⁵ to reduce the risk of casino patrons becoming problem and pathological gamblers.

Mental Health and Addiction. According to the 2006 "Gambling in the Golden State: 1998 Forward" report, there is evidence of a link between problem and pathological gambling and domestic violence, divorce, child neglect, and homelessness, but no causal link between problem and pathological and the previously mentioned social ailments.¹²⁶ The reason for this is that persons with gambling problems are likely to have addictive personalities or other personality disorders that could lead to any of the above mentioned problems. As these problems are often genetic, it is unlikely that problem and pathological gambling or the casino are the root causes of these other social ailments.

In addition, several studies examine the link between alcoholism and casinos. Because casinos serve alcohol, casino opponents tend to state that there is a link between casinos or problem and pathological gambling and alcoholism. Such a link is difficult to prove. Jon Grant et. al. state in their "Pathological Gambling and Alcohol Use Disorder" article that problem gambling is more common among the population with alcohol disorders than the general population, but that there is no direct link between the two disorders.¹²⁷ The authors state that several other studies

¹²¹ Barron, John M., Michael E. Staten, and Stephanie M. Wilshusen. "The Impacts of Casinos on Personal Bankruptcy Filing Rates." *Contemporary Economic Policy*, Vol. 20, No. 40. October 2002, 440-455.

¹²² Ibid.

¹²³ Evans, William N. and Julie H. Topoleski. "The Social and Economic Impact of Native American Casinos." *National Bureau of Economic Research*. Working Paper 9198. September 2002.

¹²⁴ Simmons, Charlene W. "Gambling in the Golden State: 1998 Forward," *California Research Bureau, California State Library*. May 2006.

¹²⁵ The MOU provides for annual payments of \$125,000 to fund programs that help problem gamblers.

¹²⁶ Ibid.

¹²⁷ Grant, Jon E., MD., Matt G. Kushner, PhD., and Suck Wong Kim, MD. "Pathological Gambling

establish a causal link between alcoholism and gambling by stating that alcohol may disinhibit reckless gambling just as it disinhibits other inappropriate behaviors, but very little empirical analysis has been undertaken that examines the causal relationship between alcohol use and gambling.¹²⁸ In addition, as other local bars and restaurants provide access to alcohol, there is no evidence that the casino will result in an increase in the instances of alcohol abuse in the County. In order to minimize the impacts to the community of serving alcohol, the casino should train staff to identify the signs of intoxication and advocate the cessation of alcohol service to persons exhibiting those signs. In addition, the casino should be vigilant in adhering to drinking age restrictions, and support local law enforcement in conducting DUI checkpoints and other programs that are known to reduce the impacts of alcohol on the community.

Other Socio-Economic Effects. In their April 2000 report on the impacts of Indian Gaming, Taylor, Krepps and Wang state that Indian casinos will bring a greater positive impact than non-Indian casinos to surrounding communities, as Indian casinos are more often located in economically depressed areas, and therefore, bring jobs to areas more in need. Further, they argue that the outlying communities benefit through a reduction in unemployment, an increase in tourism and tourism spending within the community, a decrease in welfare outlays, and a decrease in unemployment insurance expenditures¹²⁹. Although there is no consensus on the benefits of casino gambling within a community, there is also no consensus on the true incremental social costs of casino gambling. In addition, with access to gambling in some form in 48 states, there is no evidence that pathological gamblers will relocate to areas with Indian gaming casinos.

and Alcohol Use Disorder.” 2002.

¹²⁸ Ibid.

¹²⁹ Taylor, Jonathan B., Matthew Krepps, and Patrick Wang. “The National Evidence on the Socioeconomic Impacts of American Indian Gaming on Non-Indian Communities.” April 2000.

Table 19: Comparative Casino Listings

Proposed Casino		No. of Slot Machines	No. of Hotel Rooms	Population (2000 Census)			
Graton Rancheria Casino	Rohnert Park, CA	2,000 (a)	300	42,000			
Graton Rancheria Casino, Reduced Intensity Alternative	Rohnert Park, CA	1,000 (a)	100	42,000			
Case Study Cities with existing casinos							
Name of Casino	Location of Casino	Year Opened/Most Recently Expanded	S/F of Casino	No. of Slot Machines	No. of Gaming Tables	No. of Hotel Rooms	Population (2000 Census)
Thunder Valley Casino	1200 Athens Ave. Lincoln, CA Placer County	2003	200,000	2,700	98		13,900
Chumash Casino Resort	3400 E. Highway 216 Santa Ynez, CA Santa Barbara County	2003 Casino 2004 Hotel	94,000	2,000	46	106	4,584
Pala Casino Resort and Spa	11154 Hwy 76 Pala, CA San Diego County	2001 Casino 2003 Hotel	186,000	2,250	85	507	133,559
Spa Resort Casino (b)	401E Amado Rd Palm Springs, CA Riverside County	2003	45,000	1,000	59	228	42,807
Barona Valley Ranch Resort and Casino	Wildcat Canyon Rd. Lakeside, CA San Diego County	2003	310,000	2,000	70	397	19,560

Note:

(a) Number of slot machines represents an estimate given the size of the casino floor. This is the basis of comparison to the other casinos.

(b) Represents a comparable casino to a reduced intensity alternative, given that both casinos would have approximately 1,000 slot machines.

Source: Individual Casino Representatives, 2004; U.S. Census Bureau, 2000; Bay Area Economics, 2006

Table 20: 2003 Crime Statistics by Casino, City and County

Name of Casino	City and County	Population	Total Number of Crimes	Violent Crimes (a)	Property Crimes (b)	Larceny-Theft (c)	Calls for Service
Thunder Valley Casino	Casino site		256				585
	Lincoln, CA	19,923	614	47	217	350	
	Crime Per 1000 residents		31	2	11	18	
	Placer County	283,454	8,480	577	2,703	5,200	
	Crime Per 1000 residents		30	2	10	18	
	Percent of County		3.0%				
Chumash Casino Resort Santa Ynez, CA	Casino site		21	1	0	20	204
	Unincorporated Area	135,305	1,912	215	546	1,151	
	Crime Per 1000 residents		14	2	4	9	
	Santa Barbara County	410,268	8,536	1,114	2,181	5,241	
	Crime Per 1000 residents		21	3	5	13	
	Percent of County		0.2%	0.1%	0.0%	0.4%	
Pala Casino Resort and Spa Pala, CA	Casino site		39	6	21	12	181
	Unincorporated Area	460,615	10,148	1,272	4,487	4,389	
	Crime Per 1000 residents		22	3	10	10	
	San Diego County	2,976,104	110,642	14,006	42,358	54,278	
	Crime Per 1000 residents		37	5	14	18	
	Percent of County		0.04%	0.04%	0.05%	0.02%	
Spa Resort Casino	Casino site		not available				
	Palm Springs, CA	44,363	3,746	390	1,317	2,039	
	Crime Per 1000 residents		84	9	30	46	
	Riverside County	1,719,004	72,003	9,124	26,474	36,405	
	Crime Per 1000 residents		42	5	15	21	
	Percent of County		5.2%	4.3%	5.0%	5.6%	
Barona Valley Ranch Resort & Casino Lakeside, CA	Casino site		not available				
	Unincorporated Area	460,615	10,148	1,272	4,487	4,389	
	Crime Per 1000 residents		22	3	10	10	
	San Diego County	2,976,104	110,642	14,006	42,358	54,278	
	Crime Per 1000 residents		37	5	14	18	
	Percent of County		9.2%	9.1%	10.6%	8.1%	

Notes:

(a) Violent Crimes are defined as Homicide, Forcible Rape, Robbery, and Aggravated Assault.

(b) Property Crimes are defined as Burglary and Motor Vehicle Theft.

(c) Larceny-theft is defined as over \$400 and \$400 and under.

Source: Office of Attorney General, State of California, Department of Justice Crime Statistics, 2003; Reports obtained from specific county sheriff departments, 2004; BAE, 2006

Table 21: Per Capita Changes in Average Monthly Roseville Crime Reports, Thunder Valley Site

Average Number of Reports Per Month	Per Capita Percent Change (a)
Robberies - Citywide	11.85%
Burglaries - Citywide	13.26%
Auto Thefts - Citywide	14.36%
DUI Collisions - Citywide	5.61%
Drug Arrests - Citywide	5.10%
Thefts From Vehicles - Citywide	5.50%
Property Crimes in Already-Developed Residential and Industrial Neighborhoods Near Casino Routes (b)	20.94%
Total Arrests on Casino Routes	No Change
DUI Arrests on Casino Routes	3.70%
Drug Arrests on Casino Routes	43.32%

Notes:

(a) Change in crime reports is based on the period between 18 months prior to the opening of Thunder Valley and 18 months after the opening of the casino.

(b) Newly developed neighborhoods were not included since an increase in crime in previously unpopulated areas is expected with or without casino influences.

Sources: Rohnert Park Police Department Memo, February, 2006

Table 22: Casino Related Crime Rates, Grinols and Mustard Regression Analysis (a)

	<u>Aggravated Assault</u>	<u>Rape</u>	<u>Robbery</u>	<u>Murder</u>	<u>Larceny</u>	<u>Burglary</u>	<u>Auto Theft</u>
Year of Casino Opening	N/A	N/A	11.218	N/A	N/A	N/A	152.659
1 Year after Opening	N/A	N/A	32.588	N/A	N/A	N/A	183.75
2 Years after Opening	N/A	N/A	39.137	N/A	N/A	N/A	161.759
3 Years after Opening	20.306	3.339	70.427	N/A	4.132	N/A	206.769
4 Years after Opening	42.844	6.503	52.188	N/A	184.855	64.367	161.641
5 Years after Opening	99.982	9.979	65.24	N/A	614.695	325.147	271.848

Notes:

(a) This table only shows the results that indicate a trend. Results that are significant but divergent over time are not reported

Sources: *Casino, Crime and Community Costs*. Earl L. Grinols, David B. Mustard. September, 2004

Table 23: Sonoma County and Cities Crime Impact Cost Ranges

Jurisdiction	2003 Population Over Age 18 (a)	Crime Impact Cost Range			
		Wilfred/Stony Point Site Alternatives Upper Bound (b)	Lower Bound (c)	Lakeville Site Alternative Upper Bound (b)	Lower Bound (c)
Cotati	5,083	\$152,500	\$12,808	N/A	N/A
Petaluma	40,717	\$1,221,521	\$102,591	\$1,221,521	\$177,251
Santa Rosa	113,877	\$3,416,300	\$286,923	N/A	N/A
Sebastopol	5,793	\$173,786	\$14,596	N/A	N/A
Sonoma	7,732	N/A	N/A	\$231,962	\$33,659
Unincorporated Sonoma County	112,352	\$3,370,563	\$283,082	\$3,370,563	\$489,090
Total (d)	285,554	\$8,334,670	\$700,000	\$4,824,046	\$700,000

Notes:

- (a) Assumes no change in the age distribution between 2000 and 2003.
- (b) Based on Grinols and Mustard study. Assumes maximum crime costs of \$30 per adult resident in the unincorporated County and any city within ten miles. Estimates in 2003 dollars.
- (c) Based on the average law enforcement MOU payment in California.
- (d) Rohnert Park is excluded because they have an MOU agreement with the Tribe.

Sources: U.S. Census 2000; California State Department of Finance, 2008; Grinols and Mustard, 2000; California Research Bureau, 2006; BAE, 2008.

School Enrollment Impacts

The purpose of this section is to examine the relationship between a local casino and school enrollment. Unfortunately, minimal literature exists regarding the linkage between casinos and school enrollment. Although there may be concern that a new casino would result in families moving out of a community, economists and other social scientists have not estimated a statistical relationship from which this analysis can draw inferences. This analysis examines local school enrollment data to evaluate the impact of similar casinos¹³⁰ on school enrollment in other casino communities to determine whether there have been any significant deviations from enrollment trends in the school year following the opening and/or expansion of a casino. These included:

- Thunder Valley Casino adjacent to Lincoln, in unincorporated Placer County
- Chumash Casino Resort in Santa Ynez, Santa Barbara County
- Pala Casino Resort and Spa, in Pala, San Diego County
- Spa Resort Casino in Palm Springs, Riverside County
- Barona Valley Ranch Resort and Casino in Lakeside, San Diego County

As Table 24 shows, California State Department of Education data show enrollment increases for three out of five casino communities. Most notably, enrollment increased 8.8 percent in Pala California, compared to a one percent increase in the County. However, enrollment decreased in the year following the opening or expansion of a casino in two of the five communities, Lincoln and Lakeside, California. In Lincoln, enrollment dipped in the first year after the casino opened, but then increased significantly in the following year, which corresponds to large amounts of residential development in the area. In Lakeside, enrollment was declining annually before the casino opened, and continued with this trend after the casino opened. Compared to their respective counties, all but one of the communities experienced slower growth in the year following the opening of the casino. However, without understanding development trends within each of these counties, it is not possible to determine whether this is related to the casino, or other factors unrelated to the casinos.

As the data trends vary for each of the casinos, it is not possible to determine whether these decreases were significantly related to the opening of a casino; however, since enrollment is on the rise in some of the casino communities, the data suggest that over time the presence of the casino does not necessarily lead to a negative impact on local school enrollment. Finally, the general lack of analysis on this topic suggests that impacts on school enrollment heretofore have not been a major issue surrounding casino developments. It is likely that overall community growth and demographic trends drive school enrollment much more significantly than the presence or lack of a casino.

¹³⁰ See the Social Impacts section of this document for information on the comparability of these casinos to the proposed Graton Rancheria.

Table 24: 2000 - 2007 School Enrollment Statistics, Casino Communities and Respective Counties

COMMUNITY	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Thunder Valley Lincoln, CA							
<i>Western Placer</i>							
Enrollment	6,208	7,040	7,280	7,309	7,160	7,842	8,511
Percentage Change, Yr. to Yr.	N/A	13.4%	3.4%	0.4%	-2.0%	9.5%	8.5%
<i>Placer County</i>							
Enrollment	55,531	58,228	60,716	61,718	62,666	63,742	64,401
Percentage Change, Yr. to Yr.	N/A	4.9%	4.3%	1.7%	1.5%	1.7%	1.0%
Chumash Santa Ynez, CA							
<i>SY Valley + College Elem</i>							
Enrollment	1,688	1,665	1,651	1,656	1,683	1,629	1,563
Percentage Change, Yr. to Yr.	N/A	-1.4%	-0.8%	0.3%	1.6%	-3.2%	-4.1%
<i>Santa Barbara County</i>							
Enrollment	66,012	66,489	67,089	67,517	67,551	67,225	66,508
Percentage Change, Yr. to Yr.	N/A	0.7%	0.9%	0.6%	0.1%	-0.5%	-1.1%
Pala Resort & Spa Pala, CA							
<i>Bonsall Union</i>							
Enrollment	1,579	1,599	1,740	1,865	1,785	1,888	1,830
Percentage Change, Yr. to Yr.	N/A	1.3%	8.8%	7.2%	-4.3%	5.8%	-3.1%
<i>San Diego County</i>							
Enrollment	488,377	494,588	499,750	499,356	498,186	495,228	493,708
Percentage Change, Yr. to Yr.	N/A	1.3%	1.0%	-0.1%	-0.2%	-0.6%	-0.3%
Spa Resort Palm Springs, CA							
<i>Palm Springs Unified</i>							
Enrollment	20,847	21,532	22,067	22,499	23,217	23,689	24,263
Percentage Change, Yr. to Yr.	N/A	3.3%	2.5%	2.0%	3.2%	2.0%	2.4%
<i>Riverside County</i>							
Enrollment	319,910	333,330	349,607	364,857	380,964	395,183	413,059
Percentage Change, Yr. to Yr.	N/A	4.2%	4.9%	4.4%	4.4%	3.7%	4.5%
Barona Valley Ranch Lakeside, CA							
<i>Lakeside Union</i>							
Enrollment	4,913	5,022	4,974	4,871	4,522	4,358	4,294
Percentage Change, Yr. to Yr.	N/A	2.2%	-1.0%	-2.1%	-7.2%	-3.6%	-1.5%
<i>San Diego County</i>							
Enrollment	488,377	494,588	499,750	499,356	498,186	495,228	493,708
Percentage Change, Yr. to Yr.	N/A	1.3%	1.0%	-0.1%	-0.2%	-0.6%	-0.3%

Note:

Statistics in bold represent enrollment information for the year following a casino opening and/or expansion.

Sources: California Department of Education; BAE, 2007.

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Appendix A: Technical Discussion of the IMPLAN Model

This appendix provides additional clarification of the workings of the IMPLAN input-output model. It provides a step-by-step account of how IMPLAN estimates economic impacts using the casino construction project as an illustrative example. Definitions of key *italicized* terms are provided in footnotes for the benefit of the reader. This section begins with an overview of the data that IMPLAN uses internally, and moves forward through the process of how the model estimates the impacts of the construction phase of the proposed casino.

What is IMPLAN?

As stated in the main body of the text, IMPLAN is an input-output model that estimates the total economic implications of new economic activity within a specified geography. The model uses national industry data and county-level economic data to generate a series of multipliers, which in turn estimate the total economic implications of economic activity.

National Industry Data. The model uses national production functions for nearly 500 industries to determine how an industry spends its operating receipts to produce its commodities. For the construction example, this means that IMPLAN uses a production function based on the average national construction firm to determine how a firm in the construction *industry*¹³¹ spends “each dollar of outlay on goods and services to produce a dollar of output.”¹³² The model also uses a national matrix to determine the *byproducts*¹³³ that each industry generates. IMPLAN couples the national production functions with a variety of county-level economic data to determine the impacts for our example.

County-Level Economic Data. In order to estimate the county-level impacts, IMPLAN combines national industry production functions with county-level economic data. IMPLAN collects data from a variety of economic data sources to generate average output, employment, and productivity for each of the industries in a given county. It also collects data on average prices for all of the goods sold in the local economy. In the case of our example, IMPLAN uses average Sonoma County data to estimate the impacts to the County, and averages all of the economic data across the Bay Area counties to estimate the impacts to the region. In addition, IMPLAN gathers data on the types and amount of output that each industry generates within the County. This allows the model to determine how much of each production input (i.e. wood, steel, labor, etc. for the construction industry) the firm can buy locally, within the County or region. In the case of labor, the model accounts for county and regional commute patterns, so as not to overestimate the impacts from labor spending its income in the local economy. Finally, the IMPLAN model uses county-level data on the prices of goods and household expenditures to determine the consumption functions of county households and local government, taking into account the availability of each commodity within the specified geography.

Multipliers. IMPLAN combines this data to generate a series of multipliers for the local

¹³¹ An industry consists of businesses that produce goods and services. The goods and services are known as commodities. IMPLAN Pro User’s Guide, 2000.

¹³² IMPLAN Pro User’s Guide, 2000.

¹³³ The byproducts refer to any secondary commodities that the industry creates.

economy. The multiplier measures the amount of total economic activity that results from an industry (or household) spending an additional dollar in the local economy. IMPLAN uses the national and county-level data to generate type-SAM multipliers, which include the direct, indirect, and induced impacts to the local economy.

Direct Impacts. Direct impacts refer to the dollar value of economic activity available to circulate through the economy. The direct impacts may equal the operating budget (or revenues) of an industry, or less, depending on several factors. First, the direct impacts do not include payments to capital, inventory, federal taxes, or state and local taxes, as payments of these types do not circulate through the economy. However, in the case of construction, payments to local governments associated with building and permitting fees are included in the model. Payment to local governments in the model only refers to business and personal income taxes, sales taxes, and other indirect business and personal taxes.^{134,135} In the construction analysis, there will be expenditures on building and permitting fees, but as services are provided for these fees, they remain in the local economy for circulation.

Next, if there are no tax, capital, or inventory payments associated with the activity specified for the operating budget (or revenues) and the budget is related to a non-retail industry, then the direct impacts will equal the operating budget. This is particularly true for the construction industry. Because construction firms tend to be local in nature and spend a large portion of their budgets on labor, IMPLAN assumes that 100 percent of the construction budget is available to circulate through the local economy. Thus, the entire construction budget represents the direct impact to the local economy. Since IMPLAN estimates that the entire operating budget will be a direct impact on the county, and the county is within the region, the model estimates that the entire operating budget will represent the direct impact within the region, as well.

Impacts from retail expenditures differ significantly between the total economic value of retail and the amount available to circulate through the local economy. The nature of retail expenditures accounts for this difference. The model assumes that only the retail markup impacts the local economy, particularly for industries heavily populated with national firms such as gas stations and grocery stores. Since local stores buy goods from wholesalers and manufacturers outside of the area, and corporate profits also leave the local economy, only the retail markup will be available for distribution within the local economy. To the extent that retailers' headquarters are located within the county or region, the model allocates their portions of the impacts to the local economy. As the No Action alternative contains a large portion of retail space, this treatment of retail expenditures accounts for the larger differential between the total economic value and the direct impacts of the operating phase of the No Action alternative and the operating phases of the other alternatives.

Indirect Impacts. The indirect impacts refer to the "inter-industry impacts of the input-output

¹³⁴ Other indirect business and personal taxes include: motor vehicle license fees, severance taxes, estate and gift taxes, fines and fees, hunting and fishing taxes, and social security taxes.

¹³⁵ To the extent that the Tribe is exempt from paying federal and state and local taxes on the operating revenues from the casino IMPLAN underestimates the impacts of the proposed casino.

analysis.”¹³⁶ In the construction analysis this would include payments for construction inputs such as wood, steel, office supplies, and any other non-labor payments that the construction firm would pay in the building process. Indirect impacts will vary between the county and region models based on the availability of goods within the two geographies. For example, if the construction firm buys some inputs from a firm in Alameda County, those expenditures would be represented in the regional model, but not in the county model. As such, the indirect impacts will always be larger for the larger geography (region) that includes the smaller geography (county).

Induced Impacts. The induced impacts refer to the impacts of household expenditures in the model.¹³⁷ When households earn income, they spend part of that income on goods and services. The model treats households as an “industry” in determining their local expenditure patterns in the model, based on the availability of goods and services within the geography. In the construction example, the induced impacts include the expenditures of construction laborers’ incomes, as well as the expenditures of the incomes of persons who work in industries represented in the indirect impacts. First, the model accounts for local commute patterns in the geography. If 20 percent of construction workers who work in the county live outside of the county, the model will allocate 80 percent of labor’s disposable income into the model to generate induced impacts. In addition, as with industries, the model excludes payments to federal and state taxes and savings based on average local tax and savings rates for the geography. Thus, only the disposable income from local workers’ households are included in the model.

Specifying the “Event” and Running the Model

Once the model is built for the specified geographies, it is time to specify the “event” that the model will analyze and run the model.

Specifying the “Event.” The “event” refers to the total economic value of industry output that we are interested in analyzing. In the case of the construction example, the “event” is \$450 million in the construction sector during the construction phase of the casino alternative. In the case of the ongoing economic impacts of a new residential development, the “event” would be the total household incomes of the households that buy the homes. For the ongoing impacts of a commercial development, the “event” would be the total economic value of the businesses that operate in the commercial development. For each type of project, the total economic value is input into the model under its corresponding industry to specify the “event” that the model will analyze.

Running the Model. Once the event is specified, IMPLAN runs the event through the model to generate the results. IMPLAN applies the local data on average output per worker and compensation per worker to determine the direct impacts. It then applies the value of the event to the national production functions and runs a number of iterations of this value through the production functions for the local economy to determine the indirect and induced impacts. In the construction example, the model applies the \$450 million to the construction industry’s production function in the local economy to determine how much the construction firm spends in each sector, and then runs those expenditures through the production functions of each of the

¹³⁶ IMPLAN Pro User’s Guide, 2000.

¹³⁷ Ibid.

relevant industries (i.e. wood, steel, office supplies, etc.) to determine how the original \$450 million circulates and re-circulates through the economy using the local multipliers. During each iteration the model removes expenditures to government, savings, and for goods bought outside of the local economy so that the results only include those dollars that impact the local economy.

Construction Example. For our construction example, the national and local data indicate that the direct impact, or value available to circulate through the local economy, is nearly 100 percent local. The reason for this lies in the local availability of construction firms, and the labor intensiveness of the construction industry. While some materials will be purchased outside of the county or region, all of the labor will be located within the county for the duration of the construction period. Thus, IMPLAN begins with the entire construction budget as the direct impact, and then applies county-level average wages, costs, and availability of materials within the county to determine the indirect (business to business) and induced (household) impacts on the local economy.

For the indirect impacts, IMPLAN assumes that any materials available within the county will come from within the county. If a construction firm can rent equipment locally, it will. If not, it will rent from a supplier in another county in the region, if possible, and then from outside of the region. Information on the availability of goods and services comes from Bureau of Economic Analysis, which tracks industries at the county level on an annual basis, using payroll taxes and gross receipts. This is how IMPLAN determines the indirect impacts within the county for each type of industry.

In determining the induced impacts, IMPLAN uses a slightly different approach. As the induced impacts refer to household expenditures, IMPLAN makes necessary adjustments to account for this type of “industry.” When the construction budget is entered into the model, the model uses county-level average output per employee to determine the number of job-years that the construction phase will create.¹³⁸ Based on average wages per employee in the construction sector, and local tax and saving rates, the model calculates the disposable income of construction workers. As previously stated, the model also accounts for local commute patterns to reduce the amount of disposable income in the local economy. IMPLAN then applies the remaining disposable income to the average household consumption function for households in applicable income ranges.¹³⁹

There will also be induced impacts resulting from payments to labor from the businesses that benefited in the indirect round of impacts. For example, the equipment rental supplier will pay his staff, who will then buy food, clothing, shelter, etc. All of these payments are also accounted for in the induced impacts. In addition, when construction workers spend their incomes shopping for groceries, medicine, etc., those workers get paid, and their incomes are subsequently

¹³⁸ The model will return the total construction jobs necessary to support a given amount of construction activity. If the construction period is more than one year, one would need to divide the total employment reported by the projected construction period in order to avoid double counting the number of actual construction jobs.

¹³⁹ The model uses county-level wage and household income data to estimate the household incomes for types of workers with a given level of wages.

accounted for in the induced impacts.¹⁴⁰ All of these types of household expenditures represent the induced impacts of the construction phase.

Summarizing the Impacts

Once the model is run, IMPLAN generates a series of output tables to show the direct, indirect, and induced impacts within each of the model's 500 sectors. IMPLAN generates these tables for three types of impacts: output, employment, and value added.

- *Output* refers to the total economic value of the project in the local economy.
- *Employment* shows the number of employees needed to support the economic activity in the local economy. It should be noted that for annual impacts of ongoing operations, the employment figure shown represents the amount of employment needed to support that activity for a year. Thus, IMPLAN reports the total number of workers required to support the economic activity over the course of a year. In the case of a construction project, IMPLAN reports the number of workers needed to support the economic activity over the life of the project and, thus, it is necessary to divide the total number of employees who would be required to support the project by the estimated duration in years that the project would last. Furthermore, IMPLAN reports the number of jobs based on average output per employee for a given industry within the geography. This is not the same as the number of full-time positions.
- *Value Added* shows the total income that the event generates in the local economy. This income includes:
 - *Employee Compensation* – total payroll costs, including benefits¹⁴¹
 - *Proprietary Income* – payments received by self-employed individuals as income¹⁴²
 - *Other Property Type Income* – payments for rents, royalties, and dividends¹⁴³
 - *Indirect Business Taxes* – excise taxes, property taxes, fees, and sales taxes paid by businesses. These taxes occur during the normal operation of businesses, but do not include taxes on profits or income.¹⁴⁴

It should be noted that because value added impacts are based on productivity and wage

¹⁴⁰ It should be noted, that as with the indirect expenditures, the model determines the types of expenditures and amounts based on the average prices, and availability of each good within the County.

¹⁴¹ Ibid.

¹⁴² Ibid.

¹⁴³ Ibid.

¹⁴⁴ Ibid.

levels for the specified geography, it is possible for the model to estimate lower value added induced impacts in the larger area. For example, if productivity (output per worker) is higher in the smaller area than the larger area, then holding all else constant (prices, wages, etc.) value added will be higher for the smaller area, as a firm in the smaller area would need less workers to produce the same amount as in the larger area. If wages are set regionally, so that the wages per worker are the same for a firm in the smaller area as in the larger area, then the firm in the smaller area can hire fewer workers and retain more of the revenues as profits. The model would show this difference in productivity as higher value added impacts in the smaller area. This is the case for household goods in our analysis. That is, firms in Sonoma County are more productive at producing and selling household goods and services than in the overall region. Thus, the model reports higher induced value added impacts in the County than in the region. In order to avoid confusion and provide conservative estimates, the analysis reports the region's induced value added factors for both the County and region estimates.

Construction Example. In the construction example, the largest indirect output impacts in the County occur in the architecture and engineering sector, followed by automotive repair and maintenance and wholesale trade. In the region, the architectural and engineering sector receives the largest indirect impact, followed by wholesale trade and petroleum refineries. As refineries are more abundant in the region than in the County, their impacts differ within the two models. In both the County and the region, the largest induced output impacts occur in the *owner-occupied dwellings*¹⁴⁵ sector followed by food and drinking establishments and the physicians' offices sectors. As induced impacts measure the impacts of household expenditures, one would expect these sectors to receive the largest impacts. To the extent that Station Casinos and the Tribe purchase some of these goods from non-local firms, the impacts will be overstated. However, as there is no way to know what portion of services will be provided locally, IMPLAN provides the best estimate, at this point in time.

For the value added impacts, the architectural and engineering sector received the largest indirect benefit, followed by the wholesale trade and machinery and equipment rental sectors in both the County and the region. As value added represents the impacts to labor income and corporate profits, the sectors with the largest value added impacts may not match those with the largest output impacts. Sectors that pay higher wages or have larger profit margins may receive larger indirect value added impacts than sectors with lower wages or profits but more indirect output impacts. The induced impacts provide an example of this. In the County, the owner-occupied dwellings sector receives the largest induced value added impact, followed by the physicians' offices and real estate sectors. The wholesale trade sector receives more induced impacts than the real estate sector, with the real estate sector receiving slightly less benefit. However, eating and drinking establishments received the second highest amount of induced output impacts. Since real estate agents, and people who work in physician's offices tend to earn higher wages, on average, than people who work in eating and drinking establishments, the induced value added impacts to the real estate and physician's office sectors are larger than for the eating and drinking establishments sector.

¹⁴⁵ Because households spend a large portion of their incomes on payment to houses (mortgages and rent), IMPLAN created a sector to capture these household expenditures.

The indirect and induced employment impacts depend on the average output per worker in the local economy. In the construction example, architectural and engineering services have the highest indirect employment in both the County and region, followed by the employment services and wholesale trade sectors. The food and drinking establishments sector, physicians' office sector, and hospitals sector have the highest induced employment impacts.

Discrete Events vs. Ongoing Events (Construction versus Casino Operations)

The final note on the IMPLAN model refers to the difference between an analysis of a discrete event versus an ongoing event. This appendix uses the construction phase of the proposed casino as the illustrative example. The construction phase is a discrete event in that once the casino is built the construction phase will be over. The event used for this analysis was the entire construction budget, not an annual construction budget. Thus, IMPLAN reports the results of the entire construction period, whether construction occurs over one or more years. Unless the construction period is one year, these results do not represent annual impacts. For the operating phases in the main portion of this *Socio-Economic Impacts Analysis* report, the events represent annual operating receipts. For those analyses IMPLAN reports annual impacts of the operating phases of the casino and other alternatives. In order to accurately estimate the employment for a discrete event, one would need to divide the total number of jobs by the duration of the event. No other adjustments need to be made in specifying a discrete model versus an ongoing model, but the interpretation of the results vary slightly.

Appendix B: Estimated Effect Of Alternate Site Location on Commute Patterns

Part a. Effect of Change in Location on Percentage of People Commuting to Marin County

Working In	Living In Marin	Distance to Novato
Rohnert Park	1.40%	20.81 miles
Petaluma	5.10%	11.9
Lakeville/Hwy 37	6.76% est.	7.9
<i>Difference</i>	<i>3.70%</i>	<i>-8.91</i>
<i>Ratio of Distance Change to Percentage Change</i>		<i>-2.41</i>

For every 2.4 miles closer, there is a 1 percentage point increase in the proportion commuting from Marin County to Sonoma County

Part b. Effect of Change in Location on Percentage of People Commuting to Novato

Working In	Living In Novato	Distance to Novato
Rohnert Park	0.70%	20.81 miles
Petaluma	1.69%	11.9
<i>Difference</i>	<i>0.99%</i>	<i>-8.91</i>
<i>Ratio of Distance Change to Percentage Change</i>		<i>-9.00</i>

For every 9.0 miles closer, there is a 1 percentage point increase in the proportion commuting from Novato to Sonoma County

Lakeville/Hwy 37 **2.13% est.** **7.9**

Sources: 2000 U.S. Census, CTPP, provided by Metropolitan Transportation Commission; BAE, 2006

Appendix C: Effects of Indian Casinos on Surrounding Communities

Outcome Measure	Effect of Indian Casino
Earnings -- Restuarants and Bars	-9%
Earnings -- Recreation	17%
Earnings -- Retail Trade	0%
Earnings -- Gen Merchandise	10%

Notes:

These outcomes are based on findings in the Taylor, Krepps, and Wang 2000 study. They show the impacts of Indian casinos on primarily rural markets. The data do not allow is to predict the extent to which these results differ for casinos located within an urban market.

Sources: Talyor, Krepps, and Wang, 2000; Bay Area Economics, 2006

Appendix DC1: Estimated New Resident Population, No Action Alternative

Existing Rohnert Park Population

Residents	42,127
Existing Number of Households	15,669
Employment	24,270
Service Population (a)	54,262

Estimated Impacts	Alternative G No Action
Residents	1,331
Employment (b)	302
Estimated Service Population	1,482

Notes:

- (a) Service population equal to the total city population plus one-half of local employment.
(b) Although analysis estimates that all new employees will come from within the City, the new development will result in new service demand.

Source: California Dept. of Finance, 2004; ABAG, 2004; and Bay Area Economics 2006

Appendix D2: Sales Tax Revenue Estimates, No Action Alternative

	Rohnert Park
Estimated Sales Per Square Foot	\$313.67
Percent Taxable (a)	85%
Total Size of Commercial Development	151,000

Estimated Impacts	Alternative G No Action
Annual Taxable Sales from New Commercial Development	\$40,259,545

Annual Sales Tax Revenue (b) **\$402,595**

Note:

- (a) Neighborhood shopping can include grocery stores and drug stores with reduced portions of taxable sales. Thus, estimates for percent of total sales that are taxable are less than 100 percent.
- (b) One percent of total taxable sales are discretionary revenues for the local jurisdiction.

Sources: CA Department of Finance, 2004; Rohnert Park City Budget, 2003-04; Dollars and Cents of Shopping Centers, 2004; BAE, 2006

Appendix D3: Property Tax Revenue Estimates, No Action Alternative

	Rohnert Park
Estimated Number of New Single-Family Housing Units, Market Rate	210
Estimated Number of New Multifamily Housing Units, Market Rate	210
Estimated Number of New Single-Family Housing Units, Inclusionary	19
Estimated Number of New Multifamily Housing Units, Inclusionary	56
Total Size of Commercial Development	151,000
Estimated Value of New Single-Family Market Rate Housing Units, \$/unit	\$403,822
Estimated Value of New Multifamily Market Rate Housing Units, \$/unit	\$97,374
Estimated Value of New Single-Family Inclusionary Housing Units, \$/unit (a)	\$282,105
Estimated Value of New Multifamily Inclusionary Housing Units, \$/unit (b)	\$97,374
Estimated Value of New Commercial Development, \$/sf	\$339

	Alternative G
Annual Assessed Property Values	No Action
New Market Rate Single-Family Units	\$84,802,557
New Market Rate Multifamily Units	\$20,448,639
Inclusionary Rate Single-Family Units	\$5,359,986
New Inclusionary Multifamily Units	\$5,452,970
Commercial Development	\$51,136,358
Total Annual Assessed Property Values	\$167,200,510
Total Annual Property Tax Revenues (c)	\$1,672,005
City's Post-ERAF share of Property Taxes	0.151809
Net Annual Property Tax Revenues to General Fund	\$253,825

Notes:

- (a) Based on affordability for a four-person moderate income household, using 2004 HUD defined income limits, and standard mortgage assumptions (six percent interest, on a 30 year note).
- (b) We have reviewed information indicating that the value of affordable units under current conditions are not less than the value of the market rate units, therefore we assume that all rental units have the same value. Analysis assumes that inclusionary units will be part of a larger for-profit development, and therefore, will be subject to property taxes.
- (c) Property tax revenues represent one percent of total assessed value.

Sources: CA Department of Finance, 2004; Rohnert Park City Budget, 2003-04; Dollars and Cents of Shopping Centers, 2004; FARES, 2006; Meyers Group, 2006; Dollars and Cents of Multifamily Housing, 2004; Motley Fool, 2004; HUD, 2004; Sonoma County Housing Authority, 2004; Sonoma County Auditor-Controller's Office Staff, 2006; BAE, 2006

Appendix D4: Property Transfer Tax Revenue Estimates, No Action Alternative

Annual Assessed Property Values	Alternative G No Action
New Market Rate Single-Family Units	\$84,802,557
New Market Rate Multifamily Units	\$20,448,639
Inclusionary Rate Single-Family Units	\$5,359,986
New Inclusionary Multifamily Units	\$5,452,970
Commercial Development	\$51,136,358
Total Annual Assessed Property Values	\$167,200,510
Annual Property Transfer Rates	
For Sale Residential Property (a)	14%
Commercial Property (b)	5%
City Property Transfer Tax Rate, Per \$1,000 Assessed Value	
	\$0.55
Estimated Property Transfer Tax Revenues	
For Sale Residential Property	\$7,084
Commercial Property	\$2,119
Total Annual Property Transfer Tax Revenues	\$9,203

Notes:

(a) Analysis assumes residential units will turn over every seven years.

(b) Analysis assumes commercial space will turn over every twenty years. Multifamily units are included as commercial property.

Sources: CA Department of Finance, 2004; Rohnert Park City Budget, 2003-04; Dollars and Cents of Shopping Centers, 2004; FARES, 2006; Meyers Group, 2006; Dollars and Cents of Multifamily Housing, 2004; Molley Fool, 2004; HUD, 2004; Sonoma County Housing Authority, 2004; Sonoma County Auditor-Controller's Office Staff, 2006; BAE, 2006

Appendix D5: Other Revenue Estimates, No Action Alternative

City of Rohnert Park 2003-04 Budget Estimates

Revenue Source	2003-04 Revenue	Population	Item	Per Capita Revenues
DMV Motor In-Lieu Fee	\$2,400,000	42,127	Residents	\$56.97
Franchise Fees				
PG&E and Electric	\$320,000	54,262	Service Population	\$5.90
Cable TV	\$270,000	15,669	Households	\$17.23
Total Other Revenues	\$2,990,000			\$80.10

Estimated Impacts	Alternative G No Action
DMV Motor In-Lieu Fee	\$75,818
Total Franchise Fees	\$17,268
Total Annual Other Revenues	\$93,087

Sources: City of Rohnert Park 2003-04 Budget, 2004; California Department of Finance, 2004; BAE, 2006

Appendix D6: Business License Fee Revenue Estimates, No Action Alternative

Business License Fee Schedule	Annual Fee
Retail Development	
First Owner	\$50
Each Additional Owner/Employee	\$15
Multifamily Rental Units	
First Unit	\$50
Each Additional Unit	\$5

Estimated Impacts	Alternative G No Action
Number of New Employees	302
Number of New Apartments	266

Additional Business License Fees	
Retail Development	\$4,565
Multifamily Rental Units	\$1,375
Total Annual Business License Fees	\$5,940

Sources: City of Rohnert Park 2003-04 Budget, 2004; California Department of Finance, 2004; Bay Area Economics, 2006

Appendix D7: Public Safety Service Cost Estimates, No Action Alternative

City of Rohnert Park 2003-04 Budget

Service Population	54,262
Public Safety Expenditures (a)	\$13,221,584
Police/Fire Personnel	\$10,837,777
Police Protection	\$930,476
Fire Protection	\$517,100
Animal Control and General Maintenance	\$936,231
General Fund Expenditures	\$13,221,584
2003-04 Cost per Capita	\$243.66

Estimated Impacts	Alternative G No Action
New Service Population	1,482
Estimated Annual Public Safety Service Costs	\$361,067

Note:

(a) Public Safety includes Police, Fire, and Animal Control departments.

Sources: City of Rohnert Park 2003-04 Budget, 2004; California Department of Finance, 2004; Bay Area Economics, 2006

Appendix D8: Parks and Recreation Service Cost Estimates, No Action Alternative

City of Rohnert Park 2003-04 Budget

Resident Population	42,127
Department Expenditures (a)	\$2,892,014
Less: Program Revenues	(\$1,207,000)
General Fund Expenditures	\$1,685,014
2003-04 Cost per Capita	\$40.00

Estimated Impacts	Alternative G No Action
New Resident Population	1,331
Estimated Annual Parks and Recreation Service Costs	\$53,231

Note:

(a) Reflects expenditures for Parks, Community Recreation, and Aquatics

Sources: City of Rohnert Park 2003-04 Budget, 2004; California Department of Finance, 2004; Bay Area Economics, 2006

Appendix D9: Public Works Service Cost Estimates, No Action Alternative

City of Rohnert Park 2003-04 Budget

Service Population	54,262
Department Expenditures (a)	\$2,722,845
Less: Library Landscape Revenues	(\$1,600)
General Fund Expenditures	\$2,721,245
2003-04 Cost per Capita	\$50.15

Estimated Impacts	Alternative G No Action
New Service Population	1,482
Estimated Annual Public Works Service Costs	\$74,314

Note:

(a) Reflects expenditures for Public Works.

Sources: City of Rohnert Park 2003-04 Budget, 2004; California Department of Finance, 2004; Bay Area Economics, 2006

Appendix D10: General Government Cost Estimates, No Action Alternative

2003-04 General Government Expenditures (a)	\$6,189,776
2003-04 General Fund Expenditures Net of General Government (b)	\$19,919,298
General Government As Percent of All Other General Fund	31.07%

Estimated Impacts	Alternative G No Action
Estimated Direct Service Costs	
Public Safety	\$361,067
Parks and Recreation	\$53,231
Public Works	\$74,314
<hr/> Total Estimated Direct Service Costs	<hr/> \$488,613
Estimated Annual General Government Costs	\$151,833

Notes:

(a) General Government includes functions of City Council, City Attorney, City Administrator, City Clerk, Administrative Services, Finance, Legal Services, Planning, and Human Resources.

(b) General Fund expenditures net of General Government include Police, Fire, Public Works, Parks and Recreation, and Other

Sources: City of Rohnert Park 2003-04 Budget, 2004; California Department of Finance, 2004; Bay Area Economics, 2006

Appendix D11: Net Fiscal Impact to City of Rohnert Park, No Action Alternative

Revenue Impacts Summary	Alternative G No Action
Sales Tax Revenues	\$402,595
Property Tax Revenues	\$253,825
Property Transfer Tax Revenues	\$9,203
Motor Vehicle In-Lieu Fees	\$75,818
Franchise Fee Revenue	\$17,268
Business License Fees	\$5,940
<hr/>	
Subtotal Annual Revenues	\$764,651
Cost Impacts Summary	
Public Safety	\$361,067
Parks and Recreation Department	\$53,231
Public Works	\$74,314
General Government	\$151,833
<hr/>	
Subtotal Annual Costs	\$640,445
NET ANNUAL FISCAL SURPLUS	\$124,205

Sources: Rohnert Park Budget, 2003-2004; Bay Area Economics, 2006

Appendix E1: Property Tax Revenue Estimates, No Action Alternative

	Sonoma County
Estimated Number of New Single-Family Housing Units, Market Rate	210
Estimated Number of New Multifamily Housing Units, Market Rate	210
Estimated Number of New Single-Family Housing Units, Inclusionary	19
Estimated Number of New Multifamily Housing Units, Inclusionary	56
Total Size of Commercial Development	151,000
Estimated Value of New Single-Family Market Rate Housing Units, \$/unit	\$403,822
Estimated Value of New Multifamily Market Rate Housing Units, \$/unit	\$97,374
Estimated Value of New Single-Family Inclusionary Housing Units, \$/unit (a)	\$282,105
Estimated Value of New Multifamily Inclusionary Housing Units, \$/unit (b)	\$97,374
Estimated Value of New Commercial Development, \$/sf	\$339

Annual Assessed Property Values	Alternative G No Action
New Market Rate Single-Family Units	\$84,802,557
New Market Rate Multifamily Units	\$20,448,639
Inclusionary Rate Single-Family Units	\$5,359,986
New Inclusionary Multifamily Units	\$5,452,970
Commercial Development	\$51,136,358
Total Annual Assessed Property Values	\$167,200,510
Total Annual Property Tax Revenues (c)	\$1,672,005
County's Post-ERAF share of Property Taxes	0.362452
Net Annual Property Tax Revenues to General Fund	\$606,022

Notes:

(a) Based on affordability for a four-person moderate income household, using 2004 HUD defined income limits, and standard mortgage assumptions (six percent interest, on a 30 year note).

(b) We have reviewed information indicating that the value of affordable units under current conditions are not less than the value of the market rate units, therefore we assume that all rental units have the same value. Analysis assumes that inclusionary units will be part of a larger for-profit development, and therefore, will be subject to property taxes.

(c) Property tax revenues represent one percent of total assessed value.

Sources: CA Department of Finance, 2004; Sonoma County Budget, 2003-04; Dollars and Cents of Shopping Centers, 2004; FARES, 2006; Meyers Group, 2006; Dollars and Cents of Multifamily Housing, 2004; Motley Fool, 2004; HUD, 2004; Sonoma County Housing Authority, 2004; Sonoma County Auditor-Controller's Office Staff, 2006; Sonoma County Staff, 2006; BAE, 2006

Appendix E2: Property Transfer Tax Revenue Estimates, No Action Alternative

Annual Assessed Property Values	Alternative G No Action
New Market Rate Single-Family Units	\$84,802,557
New Market Rate Multifamily Units	\$20,448,639
Inclusionary Rate Single-Family Units	\$5,359,986
New Inclusionary Multifamily Units	\$5,452,970
Commercial Development	\$51,136,358
Total Annual Assessed Property Values	\$167,200,510
Annual Property Transfer Rates	
For Sale Residential Property (a)	0.14
Commercial Property (b)	0.05
City Property Transfer Tax Rate, Per \$1,000 Assessed Value	
	\$0.55
Estimated Property Transfer Tax Revenues	
For Sale Residential Property	\$7,084
Commercial Property	\$2,119
Total Annual Property Transfer Tax Revenues	\$9,203

Notes:

(a) Analysis assumes residential units will turn over every seven years.

(b) Analysis assumes commercial space will turn over every twenty years. Multifamily units are included as commercial property.

Sources: CA Department of Finance, 2004; Dollars and Cents of Shopping Centers, 2004; FARES, 2006; Meyers Group, 2006; Dollars and Cents of Multifamily Housing, 2004; Motley Fool, 2004; HUD, 2004; Sonoma County Housing Authority, 2004; Sonoma County Auditor-Controller's Office Staff, 2006; BAE, 2006

Appendix E3: Motor Vehicle In-Lieu Revenue Estimates, No Action Alternative

Sonoma County 2003-04 Budget Estimates

Revenue Source	2003-04 Revenue
Residents	472,725
Motor Vehicle In-Lieu Fees	\$26,900,000
2003-04 Revenues per Capita	\$46.03

Revenue Source	Alternative G No Action
New Residents	1,331
Total Annual Motor Vehicle In-Lieu Revenues	\$61,252

Sources: State Controller's Office, 2006; California Department of Finance, 2004; BAE, 2006

Appendix E4: Fines, Forfeitures, and Penalties Revenue Estimates, No Action Alternative

Sonoma County 2003-04 Budget Estimates

Revenue Source	2003-04 Revenue
Service Population	584,458
Fines, Forfeitures, and Penalties	\$7,679,000
2003-04 Revenues per Capita	\$13.14

Revenue Source	Alternative G No Action
New Service Population	1,482
Total Annual Additional Revenues	\$19,469

Sources: Sonoma County 2003-04 Budget, 2004; California Department of Finance, 2004; BAE, 2006

Appendix E5: Net Fiscal Impact to Sonoma County, No Action Alternative

Revenue Impacts Summary	Alternative G No Action
Sales Tax Revenues (a)	\$0
Property Tax Revenues (b)	\$606,022
Property Transfer Tax Revenues	\$9,203
Motor Vehicle License Fees	\$61,252
Fines, Forfeitures, and Penalties	\$19,469
<hr/>	
Subtotal Annual Revenues	\$695,946
Cost Impacts Summary	
Total Service Costs (c)	\$261,400
<hr/>	
Subtotal Annual Costs	\$261,400
NET ANNUAL FISCAL SURPLUS/(DEFICIT)	\$434,546

Notes:

- (a) Because development would be in City of Rohnert Park, there will be no direct sales tax revenue impact to the County.
- (b) Because development would be in City of Rohnert Park, there will be no direct property tax revenue impact to the County.
- (c) Excludes Sheriff and Emergency services, as City would be responsible for Police services.

Sources: Sonoma County Budget, 2003-2004; Bay Area Economics, 2006

Appendix F: Crime Survey Summary

Interview Contacts for Crime Survey:

BAE contacted the following departments to ascertain the impacts of the local casinos on their respective communities' law enforcement providers.

- Santa Barbara County Sheriff Jim Anderson, Chumash Casino Resort
- Sante Station, San Diego County, Captain Reynolds, Barona Valley Ranch Resort and Casino
- Valley Center, San Diego County, Lieutenant Herber, Pala Casino Resort and Spa
- Placer County Sheriff Department, Undersheriff Bonner, Thunder Valley Casino
- Riverside County Sheriff Department, Commander Hall, Palm Springs, Spa Resort and Casino

Questions and Summary of Responses

Following are the survey questions with a summary of the respondents answers provided below each question.

At first glance, has the opening/expansion of the casino impacted police service demand within your community?

All of the survey respondents acknowledged that demand for police services increased with the opening of a casino. Two of the five subjects noted that the increase was minimal while others were unable to be precise.

What type of crimes/calls for service have increased or decreased since the expansion/opening?

All respondents mentioned that the number of DUIs increased after the casino opening. Theft, forgery and other alcohol related crimes were also mentioned as increasing.

If yes, do you believe this increase in crime is a result of the casino or the increase in tourism because of the expansion/opening of the casino?

Four of the five respondents believe that the increase in crime is a result of both the opening of the casino and the increase in tourism due to the opening. The representative from the Placer County Sheriff's Department stated that only the tourism impacted the rise in crime rates due to the effective casino security staff.

What is the percent increase/decrease in calls for service?

No respondents were able to estimate the percent increase in calls for service. The representative from the Santa Barbara City Sheriff believed that on average, there have been 30 more calls per month but was unable to put that in a percent figure.

Do you have information on the number of crimes around and/or at the Casino? If yes, can I access this information on the Internet or do I need to request a copy be sent to our office?

Respondents either had crime statistics available online or sent data to BAE.

***Do you have crime statistics before and after the expansion/opening of the Indian Casino?
(Provide the number on a per capita calculation.)***

All respondents except for Sante Station and Palm Springs had crime statistics available for before and after the opening of the casino. For a summary of those statistics, please refer to Table 20 and the "Crime Rates" discussion in the Social Impacts section of this *Socio-Economic Impacts Analysis*.

Has any one particular crime (i.e., theft, robbery, assault, family offenses) increased since the expansion/opening of the casino?

Representatives from Sante Station and Placer County state that small thefts have increased the most since the opening of the casinos. Santa Barbara City and Valley Center officials believe that DUI and other traffic violations have increased the most. The representative from Palm Springs was unable to specify a certain crime.

Do you feel since the expansion/opening of the casino, the quality of life in the community as a whole has increased or decreased? Why?

The Santa Barbara City Sheriff's Department and Valley Center Sheriff's Department both believe that quality of life decreased a small amount, primarily due to traffic problems. All other respondents believed there was no impact from the casino

Appendix G: Social Services Survey Summary

Interview Contacts for Social Service Survey:

BAE contacted the following departments to ascertain the impacts of the local casinos on their respective communities' social service providers.

- Health and Human Services Placer County
- Department of Public Social Services, Riverside County
- Department of Health and Human Services, San Diego County
- Department of Social Services, Santa Barbara County

Questions and Summary of Responses

Following are the survey questions with a summary of the respondents answers provided below each question.

At first glance, how has the opening/expansion of the Indian casino impacted social service demand within your community?

Representatives from San Diego and Riverside believe that the casino has impacted the general demand for social service in the community. Santa Barbara officials were unable to estimate the change in demand while Placer County officials stated that any change was minimal.

Are there specific types of social services that are in higher demand since the opening? (i.e. increase in Alcoholics Anonymous, Gambling Anonymous, and Narcotics Anonymous meetings)

All respondents reported that all of the above services were in higher demand since the casino opening. The Santa Barbara City Social Services Department was unsure whether the increase in demand was directly related to the opening of the casino.

Have the divorce rate and/or suicide rate increased/decreased since the expansion/opening of the casino?

All of the respondents noted an increase in divorce rate since the casino opened but none were able to say if they were related. There was no change in the suicide rate.

As a percentage, how much growth in these social service areas have you experienced since the expansion/ opening of the Casino?

None of the social services departments kept specific records related to the opening of the casino. Riverside added that any correlation would be minimal.

Has there been any one particular social need the community has seen increase (i.e. family counseling, marriage counseling) as a result of the expansion/opening of the casino?

None of the social services departments kept records relative to the opening of the casino. Riverside County officials stated that general counseling demand has increased, but were unsure if it was related to the casino.

Do you feel since the expansion/opening of the casino, the quality of life in the community as a

whole has increased or decreased? Why?

Riverside County noted that there was a minimal increase in the quality of life after the opening of the casino. None of the other respondents were able to comment.