



Fiscal and Economic Impact of Casino Gaming

South Central Kansas

June 2007

Prepared by
Center for Economic Development and Business Research
W. Frank Barton School of Business
Wichita State University

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Introduction

Senate Bill 66 (SB66)¹, otherwise known as the Kansas Expanded Lottery Act (KELA), was enacted by the 2007 Kansas Legislature and became effective on April 19, 2007. The Act provides for the Kansas Lottery (Lottery) to own and operate, and the Kansas Racing and Gaming Commission (KRGC) to regulate, all gaming conducted at Gaming Facilities authorized by SB 66. Section 1(f) provides four gaming zones.

(f) "Gaming zone" means: (1) The northeast Kansas gaming zone, which consists of Wyandotte county; (2) the southeast Kansas gaming zone, which consists of Crawford and Cherokee counties; (3) the south central Kansas gaming zone, which consists of Sedgwick and Sumner counties; and (4) the southwest Kansas gaming zone, which consists of Ford county.²

The Kansas Lottery may operate one lottery gaming facility in each gaming zone. The South Central Kansas gaming zone consists of Sedgwick County and Sumner County. The location chosen for the gaming facility will dictate the distribution of casino tax revenues to local governments (see Table 1).

Table 1. Senate Bill 66, State Gaming Revenue Distribution					
Possible Locations ³	Problem Gambling and Addiction Fund	State Revenue	City Revenue	Sedgwick County Revenue	Sumner County Revenue
Downtown Wichita Casino	2%	22%	1%	1%	1%
Downtown Wellington Casino	2%	22%	1%	1%	1%
Sedgwick County Casino ⁴ (unincorporated area of county)	2%	22%		2%	1%
Sumner County Casino ⁵ (unincorporated area of county)	2%	22%		1%	2%

¹ Kansas Expanded Lottery Act, <http://www.kslottery.com/ExpandedLotteryAct/SB66.pdf>.

² SB 66, Section 1(f). p.1, <http://www.kslottery.com/ExpandedLotteryAct/SB66.pdf>.

³ This analysis examines four potential sites within the south central zone. The selection of these locations is not an endorsement of these locations. These four test sites were chosen simply to illustrate a representative sample of location possibilities.

⁴ Location used for unincorporated area of Sedgwick County analysis is north of Park City along Interstate 135.

⁵ Location used for unincorporated area of Sumner County analysis is north of Belle Plaine along Interstate 35

SB 66 provides a provision for two percent of lottery gaming facility revenues to be paid to the problem gambling and addictions grant fund. A further provision of the law provides that the state will receive no less than 22 percent of gaming facility revenues. The Act further provides a provision for payment to regional governments of an additional three percent of gaming facility revenues. Additional revenues from any casino restaurants, retail shops or hotel will be taxed in the same manner as other restaurants, retail shops and hotels.

(16) (A) if the lottery gaming facility is located in the southeast or south central Kansas gaming zone and is not located within a city, include a provision for payment of an amount equal to 2% of the lottery gaming facility revenues to the county in which the lottery gaming facility is located and an amount equal to 1% of such revenues to the other county in such zone; or (B) if the lottery gaming facility is located in the southeast or south central Kansas gaming zone and is located within a city, provide for payment of an amount equal to 1% of the lottery gaming facility revenues to the city in which the lottery gaming facility is located, an amount equal to 1% of such revenues to the county in which such facility is located and an amount equal to 1% of such revenues to the other county in such zone.⁶

Purpose of Study

Market research and other similar studies have been conducted by entities interested in operating expanded gaming facilities.⁷ Additional studies have been conducted on behalf of the Kansas Lottery and the State of Kansas. The Center for Economic Development and Business Research Fiscal and Economic Impact Study updates and extends upon previous studies.

Disclaimer

In the preparation of this report, the Center for Economic Development and Business Research assumed that all information and data provided by other reports and research is accurate and reliable. CEDBR did not take extraordinary steps to verify or audit such information, but relied on such information and data as provided for purposes of the project.

This project requires CEDBR to make predictive forecasts, estimates and/or projections (hereinafter collectively referred to as "FORWARD-LOOKING STATEMENTS"). These FORWARD-LOOKING STATEMENTS are based on information and data provided by other reports and research involves risks, uncertainties and assumptions that are difficult to predict. The FORWARD-LOOKING STATEMENTS should not be considered as *guarantees or assurances* that a certain level of performance will be achieved or that certain events will occur. While CEDBR believes that all FORWARD-LOOKING STATEMENTS it provides are reasonable based on the information and data

⁶ SB 66, New Sec. 3. (h) (12) and (13), p. 6.

⁷ *Economic & Social Impact Analysis for a Proposed Casino & Hotel*. GVA Marquette Advisors, April 2004, and *The Feasibility of Electronic and/or Casino Gaming in Kansas*, Christiansen Capital Advisors LLC, March 2004.

available at the time of writing, actual outcomes and results are dependent on a variety of factors and may differ materially from what is expressed or forecast. CEDBR does not assume any responsibility for any and all decisions made or actions taken based upon the FORWARD-LOOKING STATEMENTS provided by CEDBR.

Methodology

Gaming Revenues

One of the primary determinants of casino revenues is the proximity/access of the gaming population. For the purpose of this study, population estimates were determined for various distances from the proposed casino.⁸ The adult population, age 21 years and older, was multiplied by the current value of spending per person as determined by the Christiansen Capital Advisors' *Feasibility of Electronic and Casino Gaming in Kansas Final Report*.

$$\text{Gaming Revenues} = \sum D_i (\text{Population 21 years and older} \times \text{Annual spending per person})$$

Where D_i = the distance from Casino

Table 2. Estimated Gross Annual Gaming Revenues

Distance from Casino in miles	Annual Spending per Person*
0-10	\$ 527.64
10-25	\$ 234.23
25-50	\$ 114.76
50-75	\$ 66.97
75-100	\$ 32.22
100-125	\$ 13.37
125-150	\$ 14.36
150-175	\$ 8.99
175-200	\$ 3.29

*Estimates by Christiansen Capital Advisors, LLC in current dollar value (2007\$)

Casino Trips/Visits

The intensity of casino use was determined by taking the total population within a 50 mile radius of the casino and multiplying the population by an intensity of use factor (4.122).⁹ The calculation determines the number of visits to all regional gaming facilities. There are a number of competing regional gaming facilities – Wichita Greyhound Park, Anthony Downs, Eureka Downs, and Indian Gaming. GVA Marquette Advisors have estimated that the proposed Wichita casino should capture 77.8 percent of the potential market due to the scale and

⁸ Population estimates were determined by using GIS and U.S. Census Bureau 2000 Census SF3 data. Population totals were estimated for the study period by applying the regional annual growth rate to the Census data.

⁹ Przybylski, Michael and Laura Littlepage, *Estimating the Market for Limited Site Casino Gaming in Northern Indiana and Northeastern Illinois*, Journal of Urban Affairs, v19 no3, p. 319-33, 1997.

extensive amenities combined with the location within the center of the area's population.¹⁰ This study assumed that the GVA Marquette estimates would apply to all of the potential locations of the South Central Kansas casino. Therefore, the number of trips/visits to the proposed casino was estimated by multiplying the total number of gaming visits by the number of daily visits expected to be captured by the proposed casino.

Trips/visits beyond the 50-mile radius were estimated by dividing the estimated gaming revenues by the greater of the average daily spending of local attendees (within 50 miles) or a \$50 average per capita daily spending assumption.

The number of estimated trips was used to estimate non-gaming spending (i.e. restaurants, retail, etc.).

Hotel Revenues

The development is anticipated to have a 200-room hotel constructed adjacent and connected to the casino.¹¹ GVA Marquette estimates that a 200-room hotel located at the subject casino and supported by an effective marketing program utilizing its player club, could achieve an 85 percent annual occupancy.¹² For projection purposes, we estimated a \$90 room rate.

Substitution Effect

Substitution effects are taken into consideration in two distinct areas. The first area is in employment. It is expected that 50 percent of new jobs generated by a casino will come through substitution of existing jobs within the community.

The second substitution area is from traditional personal expenditures being diverted into gaming expenditures. According to a report done by Don Phares of the University of Missouri, 72.6 percent of gaming revenues come from other spending within the community including retail, entertainment and saving spending.¹³ In order to compute the loss of these revenues, expected gaming revenues were multiplied by 72.6 percent. The results were used to estimate the amount of sales tax that could have been generated if used in industries other than casino gaming, taking into account city and county distribution percentages.

¹⁰ GVA Marquette Advisors, *Economic & Social Impact Analysis for a Proposed Casino & Hotel*, April 2004.

¹¹ GVA Marquette, *Economic & Social Impact Analysis for a Proposed Casino & Hotel*, April 2004, p. III-8.

¹² GVA Marquette, p. III-9.

¹³ Phares, Don, *Casino Gaming in Missouri: The Spending Displacement Effect and Gaming's Net Economic Impact*, University of Missouri, St. Louis, 2001.

Fiscal Cost & Social Cost

The fiscal and social costs caused by casinos are classified as externalities because they represent direct harm to others that does not operate through the price system, are not borne by the agents that create them and therefore are not included in the decision-making process of the externality-causing agents. The social cost of casinos include crime, business and employment costs such as lost time on the job, bankruptcy, suicide, illness, direct regulatory costs, family costs such as child neglect and abuse, and abused dollars.¹⁴

This study divides the costs into two categories (Fiscal Cost and Social Cost) and allocates the estimated burden of these costs on the geographies most likely to be impacted by the externality. Fiscal costs (FC) include Community Protection Cost (CPC) and additional social welfare costs. CPC include apprehension and increased police costs, adjudication (criminal and civil justice costs) and incarceration and supervision cost. These costs were allocated between the host county and the state.

Additional fiscal costs (FC) include social welfare costs such as therapy/treatment costs, unemployment and other social services including welfare and food stamps. These social welfare costs will result in additional burden to the public welfare system. SB 66 provides a provision for two percent of lottery gaming revenues to be paid to the problem gambling and addictions grant fund in an attempt to offset these costs.

Additionally, there are social costs borne by business and families. These include loss of productivity on the job, lost time and unemployment, bankruptcy, suicide, illness, divorce, separation and abused dollars. The value of these externalities is included in the Social Cost (SC) analysis.

Fiscal Cost (FC) and Social Cost (SC) were determined by comparing a baseline of pathological and problem gamblers found in a community prior to a casino to the number of pathological and problem gamblers found in a community after casino gaming has been legalized (the acceptability factor) and made accessible to a community (the accessibility factor).

Pathological gambling is a recognized impulse control disorder in the DSM-IV of the American Psychiatric Association. Pathological gamblers (often referred to as “addicted” or “compulsive” gamblers) are identified by a number of characteristics, including repeated failures to resist the urge to gamble; loss of control over their gambling, personal lives, and employment; reliance on others to relieve a desperate financial situation caused by gambling; and committing of illegal acts to finance gambling. Problem gamblers have similar dilemmas, but to a lesser degree.

¹⁴ Grinols, Earl L., *Gambling in America: Cost and Benefits*, University of Illinois, Campaign-Urbana, p. 132, 2004.

Studies indicate that the baseline of pathological gamblers as part of the population begins at 0.77 percent as reported by the 1976 U.S. Commission on Gambling. Since gambling has been legalized and made accessible in several states, the range of pathological gamblers has increased to 1.5 to 5 percent in those states.¹⁵ This phenomenon was specifically confirmed by a 1995 study which concluded that the lifetime probable pathological and problem gamblers in Iowa increased from 1.7 percent of the public in 1989 (prior to opening a casino) to 5.4 percent in 1995.¹⁶

Table 3. Percentage of Pathological and Problem Gamblers		
	Pathological Gamblers	Problem Gamblers
Baseline Concentration	0.77%	0.93%
Projected Concentration	1.50%	3.90%
Additional Concentration	0.73%	2.97%

According to Earl Grinols of the University of Illinois, there are two ways to identify social costs; the first is through the study of problem and pathological gamblers, and the second is through direct statistical analysis.¹⁷ Gringos evaluates nine studies that estimate the social cost per pathological gambler conducted between 1981 and 2003 and three studies that estimate social cost per problem gambler conducted between 1998 and 1999. The studies reflect analysis using both methodologies. Grinols produced an adjusted average from these studies in order to estimate the social cost in the various categories of burden. In 2007 dollars, the cost to society of an additional pathological gambler is \$11,617 based on studies performed in the mid-1990s, whereas the cost to society of an additional problem gambler is \$3,311.

¹⁵ Kindt, John Warren, *The Business-Economic Impacts of Licensed Casino Gambling in West Virginia; Short-Term Gain but Long-Term Pain*, <http://www.pbs.org/wgbh/pages/frontline/shows/gamble/procon/kindt.html>.

¹⁶ Iowa Department of Human Services 1995, as quoted by Kindt.

¹⁷ Grinols, Earl L. *Gambling in America; Cost and Benefits*, University of Illinois, Champaign-Urbana, 2004.

**Table 4. Cost to Society of Additional Pathological and Problem Gamblers
Annual Fiscal Cost and Social Cost**

	Pathological Gambler		Problem Gambler	
	\$11,617		\$3,311	
Fiscal Cost (FC)	Local	State	Local	State
Community Protection Cost (CPC)				
Apprehension	\$ 252	\$ -	\$ 18	\$ -
Adjudication	\$ 193	\$ 193	\$ 111	\$ 111
Incarceration	\$ 1,700	\$ 1,700	\$ 118	\$ 118
Social Welfare Cost				
Treatment & therapy	\$ -	\$ 144	\$ -	\$ 291
UE/Welfare/Food stamps	\$ -	\$ 323	\$ -	\$ 304
Total Fiscal Impact	\$ 2,145	\$ 2,360	\$ 247	\$ 824
Social Cost (SC)	State and Local		State and Local	
Lost Productivity	\$ 804		\$ 44	
Lost time & UE	\$ 1,848		\$ 1,107	
Bankruptcy/Suicide	\$ 282		\$ -	
Illness	\$ 869		\$ -	
Family cost	\$ 70		\$ 1,089	
Abused dollars	\$ 3,239		\$ -	
Total Social Cost	\$ 7,112		\$ 2,239	

Source: Grinols, Earl L., *Gambling in America*. p. 172-174.

To determine the fiscal and economic impact of pathological and problem gamblers, the number of increased incidence of pathological and problem gamblers was multiplied by the estimated annual cost to society. These costs were allocated between state and local government weighted for the number of residents affected and the county pull factors.¹⁸

Multiplier Impacts Using RIMS II¹⁹

Effective planning for public- and private-sector projects and programs at the national, state, and local levels requires a systematic analysis of the economic impacts of these projects and programs on the affected regions. In turn, systematic analysis of economic impacts must account for the inter-industry relationships within regions because these relationships largely determine how regional economies are likely to respond to project and program changes. Thus,

¹⁸ Kansas Department of Revenue, Office of Policy and Research, April 2007. The County Trade Pull Factor (CTPF) is a measure of the relative strength of retail business communities. The County Trade Pull Factor is computed by dividing the per capita sales tax of a county by the statewide per capita sales tax. A CTPF of 1.00 is a perfect balance of trade. This measure was used to reflect the externality burden for each county given the number of additional pathological and problem gamblers residing in the county and the number of non-residents who interact commercially within the county.

¹⁹ This section is taken from *Measuring Gross Economic Impacts Associated with the Amtrak High Speed Rail Corridor Program*, prepared by the Center for Urban Transportation Research, University of South Florida, March 2000, pp. 4-7.

regional input-output (I-O) multipliers, which account for inter-industry relationships within regions, are useful tools for conducting economic impact analysis.

RIMS II is based on an accounting framework called an I-O table. For each industry, an I-O table shows the industrial distribution of inputs purchased and outputs sold. A typical I-O table in RIMS II is derived mainly from two data sources: BEA's national I-O table, which shows the input and output structure of nearly 500 U.S. industries, and the BEA's regional economic accounts, which are used to adjust the national I-O table to show a region's industrial structure and trading patterns.

Using RIMS II for impact analysis has several advantages. RIMS II multipliers can be estimated for any region composed of one or more counties and for any industry, or group of industries, in the national I-O table. The accessibility of the main data sources for RIMS II keeps the cost of estimating regional multipliers relatively low. Empirical tests show that estimates based on relatively expensive surveys and RIMS II-based estimates are similar in magnitude.

RIMS II is widely used in both the public and private sector. In the public sector, for example, the Department of Defense uses RIMS II to estimate the regional impacts of military base closings. State transportation departments use RIMS II to estimate the regional impacts of airport construction and expansion. In the private sector, analysts and consultants use RIMS II to estimate the regional impacts of a variety of projects, such as the development of shopping malls and sports stadiums.²⁰

²⁰ RIMS II multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Source: Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

Model Assumptions

Casino Investment Cost Assumptions

SB 66 requires a minimum facility investment of \$225 million for the south central casino. To estimate the distribution of this investment as shown in Table 5 below, CEDBR used the distribution of investment expenditures estimated by GVA Marquette scaled to the current estimated investment.²¹

Table 5. Initial Investment Cost Assumptions	
Land	\$6,750,000
Construction	\$128,250,000
Construction of Casino	\$51,750,000
Construction of Hotel/Restaurant	\$39,375,000
Site Improvements/Parking Lot	\$37,125,000
Machinery and Equipment	\$90,000,000
Furniture, Fixtures and Equipment	\$18,000,000
Gaming Equipment and Signage	\$72,000,000
Total	\$225,000,000

Source: GVA Marquette and Firm Data Sheet, p. IV-2

Expected Wages and Employment

Table 6. Expected Wages and Employment by Classification			
Classification	Average Wage USA*	Number of Jobs in Wage Specific Class**	Total Wages
Gaming	\$25,950	578	\$14,999,100
Hotel	\$25,220	114	\$2,875,080
Food and Beverage	\$22,690	192	\$4,356,480
Gift Shop	\$22,510	4	\$90,040
Administrative/General	\$38,870	36	\$1,399,320
Marketing	\$53,570	29	\$1,553,530
Maintenance	\$23,670	86	\$2,035,620
Security	\$27,150	116	\$3,149,400
	Total	1,155	\$30,458,570
	Total Average Wage		\$26,371

* Bureau of Labor Statistics

** GVA Marquette Advisors

²¹ GVA Marquette, *Economic & Social Impact Analysis for a Proposed Casino & Hotel*, p. IV-2.

Expected Direct Expenditures of Casino Facility for Goods and Services

Table 7. Expected Direct Expenditures for Goods and Services by Classification

Classification	Expenditures in Kansas	Percent Taxable Expenditures	Taxable Expenditures*
Marketing	\$25,475,175	0%	\$0
Food and Beverage	\$15,221,250	0%	\$0
Gift Shop	\$717,750	0%	\$0
Gaming Supplies	\$3,859,875	0%	\$0
Utilities	\$6,688,125	100%	\$6,688,125
Maintenance/Supplies	\$7,841,250	10%	\$784,125
Admin/General	\$18,405,000	0%	\$0
Total	\$78,208,425	10%	\$7,472,250

* Wholesale purchases are not subject to sales tax. Only final goods and services are subject to sales tax.

Source: GVA Marquette Advisors

Gaming Revenues

Table 8. Estimated Gross Gaming Revenues for Downtown Wichita Casino, 2009

Distance from Casino in miles	Adult Population*	Spending per Person**	Total Revenue
0-10	288,537	\$ 527.64	\$ 152,243,615
10-25	71,034	\$ 234.23	\$ 16,638,017
25-50	134,054	\$ 114.76	\$ 15,383,519
50-75	95,530	\$ 66.97	\$ 6,397,501
75-100	255,270	\$ 32.22	\$ 8,225,793
100-125	335,746	\$ 13.37	\$ 4,489,538
125-150	1,157,721	\$ 14.36	\$ 16,622,869
150-175	1,483,504	\$ 8.99	\$ 13,333,168
175-200	1,208,836	\$ 3.29	\$ 3,974,839
Total	5,030,231		\$ 237,308,859

* Age 21-years and older

**Estimates by Christiansen Capital Advisors, LLC in current dollar value (2007\$)

Table 9. Estimated Gross Gaming Revenues for Downtown Wellington Casino, 2009

Distance from Casino in miles	Adult Population*	Spending per Person**	Total Revenue
0-10	7,634	\$ 527.64	\$ 4,028,106
10-25	81,789	\$ 234.23	\$ 19,157,127
25-50	364,482	\$ 114.76	\$ 41,826,659
50-75	160,390	\$ 66.97	\$ 10,741,081
75-100	238,340	\$ 32.22	\$ 7,680,256
100-125	1,108,541	\$ 13.37	\$ 14,823,214
125-150	767,864	\$ 14.36	\$ 11,025,195
150-175	700,011	\$ 8.99	\$ 6,291,435
175-200	1,355,415	\$ 3.29	\$ 4,456,812
Total	4,784,465		\$ 120,029,886

* Age 21-years and older

**Estimates by Christiansen Capital Advisors, LLC in current dollar value (2007\$)

Distance from Casino in miles	Adult Population*	Spending per Person**	Total Revenue
0-10	109,417	\$ 527.64	\$ 57,732,911
10-25	260,817	\$ 234.23	\$ 61,090,112
25-50	121,327	\$ 114.76	\$ 13,923,037
50-75	127,112	\$ 66.97	\$ 8,512,534
75-100	167,980	\$ 32.22	\$ 5,412,979
100-125	443,926	\$ 13.37	\$ 5,936,095
125-150	890,055	\$ 14.36	\$ 12,779,651
150-175	1,812,518	\$ 8.99	\$ 16,290,219
175-200	1,087,285	\$ 3.29	\$ 3,575,159
Total	5,020,436		\$ 185,252,699

* Age 21-years and older

**Estimates by Christiansen Capital Advisors, LLC in current dollar value (2007\$)

Table 11. Estimated Gross Gaming Revenues for Sumner County Casino, 2009

Distance from Casino in miles	Adult Population*	Spending per Person**	Total Revenue
0-10	27,525	\$ 527.64	\$ 14,523,160
10-25	312,535	\$ 234.23	\$ 73,203,924
25-50	115,183	\$ 114.76	\$ 13,218,062
50-75	127,715	\$ 66.97	\$ 8,552,881
75-100	290,474	\$ 32.22	\$ 9,360,219
100-125	724,006	\$ 13.37	\$ 9,681,282
125-150	1,150,123	\$ 14.36	\$ 16,513,775
150-175	772,244	\$ 8.99	\$ 6,940,639
175-200	1,570,090	\$ 3.29	\$ 5,162,697
Total	5,089,896		\$ 157,156,640

* Age 21-years and older

**Estimates by Christiansen Capital Advisors, LLC in current dollar value (2007\$)

Total Casino Complex Revenues

Hotel revenues were estimated for a 200-room hotel located at the subject casino with 85 percent annual occupancy and a \$90 room rate.²² Retail estimates were derived by taking the number of visitor trips and multiplying by an estimated \$55 daily spending (i.e. restaurants, retail, etc.).²³

Table 12. Downtown Wichita Casino Projected Revenues				
	Year 1-5	Year 6-10	Year 11-15	Year 16-20
Gaming	\$1,196,277,578	\$1,220,911,534	\$1,246,053,996	\$1,271,715,486
Hotel	\$27,922,500	\$27,922,500	\$27,922,500	\$27,922,500
Food/Retail	\$456,709,948	\$465,917,514	\$475,310,710	\$484,893,278
Total	\$1,680,910,026	\$1,714,751,548	\$1,749,287,205	\$1,784,531,265

Table 13. Downtown Wellington Casino Projected Revenues				
	Year 1-5	Year 6-10	Year 11-15	Year 16-20
Gaming	\$605,208,988	\$618,018,708	\$631,100,452	\$644,460,014
Hotel	\$27,922,500	\$27,922,500	\$27,922,500	\$27,922,500
Food/Retail	\$869,244,237	\$886,768,759	\$904,646,585	\$922,884,841
Total	\$1,502,375,725	\$1,532,709,967	\$1,563,669,537	\$1,595,267,355

Table 14. Sedgwick County Casino Projected Revenues				
	Year 1-5	Year 6-10	Year 11-15	Year 16-20
Gaming	\$933,915,425	\$953,283,456	\$973,054,283	\$993,236,308
Hotel	\$27,922,500	\$27,922,500	\$27,922,500	\$27,922,500
Food/Retail	\$506,798,064	\$517,015,438	\$527,438,801	\$538,072,306
Total	\$1,468,635,989	\$1,498,221,394	\$1,528,415,584	\$1,559,231,113

Table 15. Sumner County Casino Projected Revenues				
	Year 1-5	Year 6-10	Year 11-15	Year 16-20
Gaming	\$792,331,118	\$808,906,588	\$825,829,900	\$843,108,377
Hotel	\$27,922,500	\$27,922,500	\$27,922,500	\$27,922,500
Food/Retail	\$876,089,961	\$893,752,496	\$911,771,119	\$930,153,010
Total	\$1,696,343,579	\$1,730,581,584	\$1,765,523,519	\$1,801,183,887

²² GVA Marquette. p. III-9.

²³ International Association of Convention and Visitors Bureau adjusted for Wichita market conditions.

Summary of Findings

The following tables summarize the fiscal impacts on city, county and state governments for each of the four test locations. The tables present a variety of measures including a benefit-cost ratio. This ratio compares public benefits over a 20-year period from the casino to public costs during the same period. For example, a benefit-cost ratio of 1.55 (or 1.55 to 1) shows that the 20-year benefits are 155 percent of public costs. Conversely, benefit-cost ratios of 0.75 shows public benefits are only 75 percent of public costs – costs exceed benefits.

Column Titles

- **BFA** – The basic fiscal analysis is an estimate of the fiscal impact of the proposed casino without taking into account substitution effects, fiscal cost and social cost estimates. This basic analysis does include multiplier effects of new jobs, construction activity and revenues produced by the casino hotel by assessing the impact of casino operations and the impact of payroll expenditures on businesses within the community. The analysis also takes worker spending patterns into account.
- **SE** – Substitution Effect - This column of data shows estimates of the benefit-cost ratio attributed to the respective government entity taking into account the impact of the substitution effect in addition to the basic fiscal analysis. This analysis accounts for the reshuffling of existing economic activity away from entertainment and retail businesses within the community to a casino hotel.

Fiscal impact analyses calculated by CEDBR typically only consider the basic fiscal analysis (BFA) and substitution effects (SE).²⁴ However, casino development discussions tend to include analysis on additional fiscal costs (FC) and social costs (SC) that result in conjunction with casino operations.

- **FC** – Fiscal Cost - This column of data shows estimates of the benefit-cost ratio attributed to the respective government entity taking into account community protection cost and social welfare expenditures in addition to the basic fiscal analysis and the substitution analysis. These fiscal costs are assumed to be covered by the local and state governments in order to maintain the current level of security and overall social welfare.
- **SC** – Social Cost – This column of data shows estimates of the benefit-cost ratio accountable to the respective government entity taking into account the social costs that impact the two counties within the south central Kansas gaming zone in addition to the fiscal costs, substitution costs and basic fiscal analysis. These costs are the portion of social costs that are attributable to the respective government entity in order to maintain the overall quality of life within the respective governments.

²⁴ For example, fiscal impact analysis for a new manufacturing facility would not include the potential environmental impact that the community may incur due to manufacturing operations.

Additional social costs are incurred and are not included in the analysis. These additional social costs are allocated to adjacent counties within the 50-mile study radius.

Benefit Cost Ratio Analysis

In tables 16 through 19, benefit-cost ratios of less than 1 are highlighted – costs exceed benefits.

Table 16. Benefit Cost Ratio Analysis - Downtown Wichita Casino				
	BFA	SE	FC	SC
Wichita				
Public benefits 20-year period	\$96,191,997	\$96,191,997	\$96,191,997	\$96,191,997
Public costs 20-year period	\$1,753,254	\$44,334,172	\$216,894,103	\$827,031,684
Benefit-Cost Ratio	54.86	2.17	0.44	0.12
Sedgwick County				
Public benefits 20-year period	\$78,685,198	\$78,685,198	\$78,685,198	\$78,685,198
Public costs 20-year period	\$1,290,968	\$22,765,521	\$195,325,452	\$805,463,033
Benefit-Cost Ratio	60.95	3.46	0.40	0.10
Kansas				
Public benefits 20-year period	\$1,329,992,994	\$1,329,992,994	\$1,329,992,994	\$1,329,992,994
Public costs 20-year period	\$10,671,875	\$305,117,861	\$930,776,923	\$1,108,104,472
Benefit-Cost Ratio	124.63	4.36	1.43	1.20
Sumner County				
Public benefits 20-year period	\$49,531,180	\$49,531,180	\$49,531,180	\$49,531,180
Public costs 20-year period	\$118,898	\$1,241,423	\$1,241,423	\$28,728,437
Benefit-Cost Ratio	416.59	39.90	39.90	1.72
Basic Fiscal Analysis (BFA), Substitution Effect (SE), Fiscal Cost (FC), Social Cost (SC)				

Table 17. Benefit Cost Ratio Analysis - Downtown Wellington Casino				
	BFA	SE	FC	SC
Wellington				
Public benefits 20-year period	\$92,813,615	\$92,813,615	\$92,813,615	\$92,813,615
Public costs 20-year period	\$160,303	\$2,836,311	\$162,231,638	\$175,911,796
Benefit-Cost Ratio	578.99	32.72	0.57	0.53
Sumner County				
Public benefits 20-year period	\$88,280,236	\$88,280,236	\$88,280,236	\$88,280,236
Public costs 20-year period	\$7,854,190	\$8,825,781	\$168,221,107	\$181,901,266
Benefit-Cost Ratio	11.24	10.00	0.52	0.49
Kansas				
Public benefits 20-year period	\$783,076,169	\$783,076,169	\$783,076,169	\$783,076,169
Public costs 20-year period	\$10,623,205	\$247,138,564	\$825,066,069	\$988,865,291
Benefit-Cost Ratio	73.71	3.17	0.95	0.79
Sedgwick County				
Public benefits 20-year period	\$26,635,092	\$26,635,092	\$26,635,092	\$26,635,092
Public costs 20-year period	\$559,019	\$19,146,649	\$19,146,649	\$1,233,797,141
Benefit-Cost Ratio	47.65	1.39	1.39	0.02
Basic Fiscal Analysis (BFA), Substitution Effect (SE), Fiscal Cost (FC), Social Cost (SC)				

Table 18. Benefit Cost Ratio Analysis - Sedgwick County Casino

	BFA	SE	FC	SC
Sedgwick County				
Public benefits 20-year period	\$106,748,452	\$106,748,452	\$106,748,452	\$106,748,452
Public costs 20-year period	\$1,302,289	\$21,300,396	\$365,032,349	\$1,578,878,204
Benefit-Cost Ratio	81.97	5.01	0.29	0.07
Kansas				
Public benefits 20-year period	\$1,076,074,932	\$1,076,074,932	\$1,076,074,932	\$1,076,074,932
Public costs 20-year period	\$10,443,524	\$284,982,078	\$908,125,034	\$1,084,739,455
Benefit-Cost Ratio	103.04	3.78	1.18	0.99
Sumner County				
Public benefits 20-year period	\$38,670,052	\$38,670,052	\$38,670,052	\$38,670,052
Public costs 20-year period	\$79,265	\$1,123,098	\$1,123,098	\$28,483,415
Benefit-Cost Ratio	487.86	34.43	34.43	1.36
Basic Fiscal Analysis (BFA), Substitution Effect (SE), Fiscal Cost (FC), Social Cost (SC)				

Table 19. Benefit Cost Ratio Analysis - Sumner County Casino

	BFA	SE	FC	SC
Sumner County				
Public benefits 20-year period	\$128,824,586	\$128,824,586	\$128,824,586	\$128,824,586
Public costs 20-year period	\$7,852,620	\$8,948,493	\$328,693,117	\$356,053,433
Benefit-Cost Ratio	16.41	14.40	0.39	0.36
Kansas				
Public benefits 20-year period	\$968,942,412	\$968,942,412	\$968,942,412	\$968,942,412
Public costs 20-year period	\$11,472,767	\$278,905,957	\$858,562,893	\$1,022,852,279
Benefit-Cost Ratio	84.46	3.47	1.13	0.95
Sedgwick County				
Public benefits 20-year period	\$34,348,971	\$34,348,971	\$34,348,971	\$34,348,971
Public costs 20-year period	\$559,019	\$21,498,724	\$21,498,724	\$1,235,344,579
Benefit-Cost Ratio	61.45	1.60	1.60	0.03
Basic Fiscal Analysis (BFA), Substitution Effect (SE), Fiscal Cost (FC), Social Cost (SC)				

Project Summary

The Project Summary section contains information assumed about spending and hiring habits of a casino without multiplier or substitution effects taken into account.

Construction impacts equal total construction salaries divided by the average construction worker salary for the area to create an estimate for the number of new construction jobs. Multipliers respective to construction are used to create a total job and total payroll effect for the community. This total effect is the number of jobs created not only by new construction jobs, but also by new jobs that are in support of the initial construction jobs.

The economic impact of the firm's operations uses the original assumptions on hiring and spending patterns taking into account multiplier and substitution effects. Taking substitution into account, direct jobs/payroll in this section is lower than the total number of positions the casino will hire. This is expected. Direct jobs refer to the total number of "new" jobs to the community. For example, assume there are 100 jobs in your community. A new company comes to town that will hire 10 people. With a 50 percent substitution rate your town will gain 5 direct jobs, making the direct plus existing jobs in your community 105.

Total jobs account for multiplier effects. The number of direct jobs is taken times a multiplier to create total jobs. Total jobs are the number of direct jobs gained to the community plus the number of jobs needed to support the direct jobs. Back to the example: if you have 5 direct jobs and a multiplier of 1.2, you now have 6 total new jobs or 106 jobs in your community.

Table 20. Downtown Wichita Casino Summary		
	Sedgwick County	Sumner County
PROJECT SUMMARY (no multipliers, no substitution)		
Number of new jobs for 20-year period	1,155	104
Amount of payroll for 20-year period	\$609,170,100	\$54,825,309
Amount of capital investment for 20-year period	\$225,000,000	\$0
Land	\$7,000,000	\$0
Buildings	\$128,125,000	\$0
Machinery and Equipment	\$89,875,000	\$0
CONSTRUCTION IMPACTS		
Jobs Multiplier	1.9202	1.473
Earnings Multiplier	1.7759	1.3665
Direct jobs	1,372	157
Direct payroll earnings	\$45,029,531	\$5,163,438
Total jobs	2,635	232
Total payroll earnings	\$79,967,945	\$7,055,837
FIRM MULTIPLIERS (On-going Operations)		
Jobs	1.3388	1.1948
Earnings	1.5737	1.2572
ECONOMIC IMPACT OF FIRM OPERATIONS		
<i>Number of jobs 20-year period</i>		
Direct	578	52
Total	773	62
<i>Payroll earnings for 20-year period</i>		
Direct	\$304,585,050	\$27,412,655
Total	\$479,325,493	\$34,463,189

Table 21. Downtown Wellington Casino Summary		
	Sedgwick County	Sumner County
PROJECT SUMMARY (no multipliers, no substitution)		
Number of new jobs for 20-year period	924	1,155
Amount of payroll for 20-year period	\$487,336,080	\$609,170,100
Amount of capital investment for 20-year period	\$0	\$225,000,000
Land	\$0	\$7,000,000
Buildings	\$0	\$128,125,000
Machinery and Equipment	\$0	\$89,875,000
CONSTRUCTION IMPACTS		
Jobs Multiplier	1.9202	1.473
Earnings Multiplier	1.7759	1.3665
Direct jobs	1,372	157
Direct payroll earnings	\$45,029,531	\$5,163,438
Total jobs	2,635	232
Total payroll earnings	\$79,967,945	\$7,055,837
FIRM MULTIPLIERS (On-going Operations)		
Jobs	1.3388	1.1948
Earnings	1.5737	1.2572
ECONOMIC IMPACT OF FIRM OPERATIONS		
<i>Number of jobs 20-year period</i>		
Direct	462	578
Total	619	690
<i>Payroll earnings for 20-year period</i>		
Direct	\$243,668,040	\$304,585,050
Total	\$383,460,395	\$382,924,325

Table 22. Sedgwick County Casino Summary

	Sedgwick County	Sumner County
PROJECT SUMMARY (no multipliers, no substitution)		
Number of new jobs for 20-year period	1,155	69
Amount of payroll for 20-year period	\$609,170,100	\$36,550,206
Amount of capital investment for 20-year period	\$225,000,000	\$0
Land	\$7,000,000	\$0
Buildings	\$128,125,000	\$0
Machinery and Equipment	\$89,875,000	\$0
CONSTRUCTION IMPACTS		
Jobs Multiplier	1.9202	1.473
Earnings Multiplier	1.7759	1.3665
Direct jobs	1,372	157
Direct payroll earnings	\$45,029,531	\$5,163,438
Total jobs	2,635	232
Total payroll earnings	\$79,967,945	\$7,055,837
FIRM MULTIPLIERS (On-going Operations)		
Jobs	1.3388	1.1948
Earnings	1.5737	1.2572
ECONOMIC IMPACT OF FIRM OPERATIONS		
<i>Number of jobs 20-year period</i>		
Direct	578	35
Total	773	41
<i>Payroll earnings for 20-year period</i>		
Direct	\$304,585,050	\$18,275,103
Total	\$479,325,493	\$22,975,459

Table 23. Sumner County Casino Summary

	Sedgwick County	Sumner County
PROJECT SUMMARY (no multipliers, no substitution)		
Number of new jobs for 20-year period	924	1,155
Amount of payroll for 20-year period	\$487,336,080	\$609,170,100
Amount of capital investment for 20-year period	\$0	\$225,000,000
Land	\$0	\$7,000,000
Buildings	\$0	\$128,125,000
Machinery and Equipment	\$0	\$89,875,000
CONSTRUCTION IMPACTS		
Jobs Multiplier	1.9202	1.473
Earnings Multiplier	1.7759	1.3665
Direct jobs	1,372	157
Direct payroll earnings	\$45,029,531	\$5,163,438
Total jobs	2,635	232
Total payroll earnings	\$79,967,945	\$7,055,837
FIRM MULTIPLIERS (On-going Operations)		
Jobs	1.3388	1.1948
Earnings	1.5737	1.2572
ECONOMIC IMPACT OF FIRM OPERATIONS		
<i>Number of jobs 20-year period</i>		
Direct	462	578
Total	619	690
<i>Payroll earnings for 20-year period</i>		
Direct	\$243,668,040	\$304,585,050
Total	\$383,460,395	\$382,924,325

Balanced Accounts

In order to maintain the quality of life of the area, the additional fiscal and economic costs incurred due to a casino would need to be covered by additional governmental revenues. Under the current guidelines of SB 66, cities and counties in the south central region likely will not be able to fully cover the fiscal and economic costs incurred by the onset of casino operations. There are several ways to cover these costs including requiring a casino to give a larger percentage of its gaming revenues to the city and county governments in which the casino resides and/or changing the distribution of gaming funds by reducing the portion going to the state and increasing the portion going to cities and counties.

Table 26 presents estimates of gaming revenues/percentages required to fully cover forecasted fiscal costs incurred as a result of casino operations. The estimated shortfall for the 20-year period is \$116 million for the city of Wichita and \$114 million for Sedgwick County. Kansas is collecting \$438 million more than required to cover its fiscal costs. The state only requires 15.13 percent of gaming revenues in order to break-even.

Table 27 presents estimates of the gaming revenues/percentages required to fully cover forecasted fiscal and economic costs incurred as a result of casino operations. The estimated shortfall for the 20-year period is \$726 million for the city of Wichita and \$724 million for Sedgwick County. In order to cover these costs fully, the city would need to collect 15.8 percent of gaming revenues while the county would need to collect 15.7 percent of gaming revenues. The state is currently collecting \$260 million more than it needs to fully cover its cost. The state would need to collect only 21.39 percent of gaming revenues (less than currently allocated) to fully cover its costs. However, in order to fully cover both fiscal and economic impacts the three taxing entities would need to collect 52.79 percent of gaming revenues, well above the 27 percent allocated under SB 66.²⁵

When examining the data presented in Table 27 it is important to keep in mind the issue of moral hazard. The burden of social costs falls upon families and businesses. Government payments to offset these costs would redistribute the risk of the gaming population and therefore potentially change people's behavior. This could create a moral hazard.²⁶

²⁵ SB 66, New Sec. 3. (h) (12) and (13), p. 6.

²⁶ In economic theory the term moral hazard refers to the possibility that the redistribution of risk (such as insurance which transfers risk from the insured to the insurer) changes people's behavior. For example, a person whose automobile is insured against theft may be less vigilant in locking the vehicle than an individual who is not insured.

http://en.wikipedia.org/wiki/Moral_hazard

**Table 24. Funds Required to Cover ALL Costs - Downtown Wichita Casino
Basic Fiscal Analysis (BFA)**

	Benefits	Gaming Revenues	Total Revenues	Costs	Balance (Revenues - Costs)	Additional Funds Needed from Gaming Revenues
Wichita	\$43,729,831	\$49,349,586	\$93,079,417	\$1,753,254	\$91,326,163	0.00%
Sedgwick	\$27,765,865	\$49,349,586	\$77,115,451	\$1,290,968	\$75,824,483	0.00%
Kansas	\$131,563,208	\$1,184,390,063	\$1,315,953,271	\$10,671,875	\$1,305,281,396	0.00%

**Table 25. Funds Required to Cover ALL Costs - Downtown Wichita Casino
With Substitution Effect (SE)**

	Benefits	Gaming Revenues	Total Revenues	Costs	Balance (Revenues - Costs)	Additional Funds Needed from Gaming Revenues
Wichita	\$43,729,831	\$49,349,586	\$93,079,417	\$36,742,425	\$56,336,992	0.00%
Sedgwick	\$27,765,865	\$49,349,586	\$77,115,451	\$18,936,826	\$58,178,625	0.00%
Kansas	\$131,563,208	\$1,184,390,063	\$1,315,953,271	\$252,621,122	\$1,063,332,149	0.00%

**Table 26. Funds Required to Cover ALL Costs - Downtown Wichita Casino
With Fiscal Costs (FC)**

	Benefits	Gaming Revenues	Total Revenues	Costs	Balance (Revenues - Costs)	Additional Funds Needed from Gaming Revenues
Wichita	\$43,729,831	\$49,349,586	\$93,079,417	\$209,302,356	(\$116,222,939)	2.36%
Sedgwick	\$27,765,865	\$49,349,586	\$77,115,451	\$191,496,757	(\$114,381,306)	2.32%
Kansas	\$131,563,208	\$1,184,390,063	\$1,315,953,271	\$878,280,184	\$437,673,087	0.00%

**Table 27. Funds Required to Cover ALL Costs - Downtown Wichita Casino
With Social Costs (SC)**

	Benefits	Gaming Revenues	Total Revenues	Costs	Balance (Revenues - Costs)	Additional Funds Needed from Gaming Revenues
Wichita	\$43,729,831	\$49,349,586	\$93,079,417	\$819,439,937	(\$726,360,520)	14.72%
Sedgwick	\$27,765,865	\$49,349,586	\$77,115,451	\$801,634,338	(\$724,518,887)	14.68%
Kansas	\$131,563,208	\$1,184,390,063	\$1,315,953,271	\$1,055,607,733	\$260,345,538	0.00%

Limitations

We recognize that this analysis is based on estimates and studies of other communities. The experiences of these other communities may or may not reflect the actual experiences of the south central zone. In evaluating other studies and selecting parameters to use for the model, we erred on the side of conservatism. In other words, we tended to select moderate revenue estimates and average costs across studies.

Revenue estimates were determined using radius proximity analysis. We believe that there are a couple of limitations to this methodology. First, it does not consider income differentials of the population across distances. Second, we believe the model probably reflects greater sensitivity to small distance differentials than actually exists in the south central zone. Consequently, we believe that revenue estimates for the Downtown Wichita Casino may be overstated when compared to the other study areas.

We did not attempt to capture the fiscal and social costs of counties outside of Sedgwick County.

Potential social benefits of a casino hotel are difficult to value and were therefore not estimated. These benefits could include an increase of entertainment options for the community or an increase in the number of conventions due to the attraction from a casino hotel.

This study does not attempt to estimate the fiscal or economic impact at competing regional gaming facilities – Wichita Greyhound Park, Anthony Downs, Eureka Downs, and Indian Gaming. Nor does the study attempt to estimate changes in current lottery revenues to the state that may also be affected by the substitution effect of casino gaming.