



# The Potential Impacts of a Casino in Danville

December 3, 2019

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# Introduction

Dear Dan River Region,

On February 23, 2019, the Virginia General Assembly approved legislation to authorize several steps that could potentially lead to a local referendum in 2020 on the question of whether or not casino gambling would be allowed in Danville, Virginia.

The Board of Directors of Danville Regional Foundation (DRF) wanted to know more about what a casino and entertainment complex could mean for this community. We wanted to examine a range of impacts, both economic and social, and, perhaps most importantly, we wanted to learn how to ask better questions on a subject that we admittedly have little knowledge.

With this in mind, the Board contracted with Fourth Economy Consulting, a national community and economic development consulting firm located in Pittsburgh, Pennsylvania, to produce an economic analysis of casino communities similar to our size and demographics, while also focusing on the social impacts that would affect our everyday lives in the Dan River Region.

In the following pages, you will see the result of the past six months of work which outlines both the potential positive and negative impacts.

**Neither DRF nor this Board is taking a position on whether casino gambling is good or bad for the Dan River Region, much less a position regarding any legislative action.**

Instead, we offer this study with the hope that it will first, provide useful information as we work to better understand any future development; and second, assist us in asking better questions.

While there were many points generated by the study, there are three key points that we bring to your attention:

1. The economic impacts for our region are directly related to the tax rates that the state will enact. The proposed tax rates in Virginia coming to the local jurisdictions have varied in conversation but all tax rates are below those in other casino communities. For example, 0% is proposed locally in the state-led Joint Legislative Audit & Review Commission study to a proposed 10% in early legislation introduced (but not passed) in 2019. What are the advantages for our

state and our community at these lower rates that would counterbalance the lower local tax revenues?

2. In the following study, Fourth Economy notes that casino properties work best when fully integrated with an existing tourism strategy. From their data, at the lowest revenue projections, a casino in Danville will require 500 visitors spending money in the casino every day of the year. How can the Dan River Region develop a more robust tourism platform that can support and maximize the regional benefits of a casino?

3. This study speculates that the majority of visitors to a casino complex will come from North Carolina. While there is a casino in Cherokee, how long until the rest of North Carolina passes its own casino legislation? Will this impact our competitive advantage?

We look forward to the conversations in the region that will occur as this study is discussed, digested and examined in the months to come. The full report can be found online at [www.drfonline.org](http://www.drfonline.org).

Signed,

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## **About This Study**

The Danville Regional Foundation engaged Fourth Economy to conduct a study of the impacts of the proposed gambling and entertainment complex on Danville and surrounding communities. A recent report done by Chmura Economics and Analysis, based on a proposed casino project in Bristol, VA examined only the potential economic benefits.

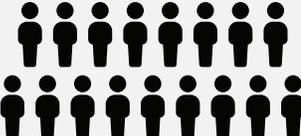
The Danville Regional Foundation (DRF) intended for this report to provide a comprehensive and objective analysis of the potential impacts of a proposed gambling casino and entertainment complex on Danville, VA and the surrounding communities. This report aims to inform the public discussion in an unbiased fashion in order to support an eventual public referendum. This report identifies positive and negative impacts that have been documented in research conducted by others, as well as original research in a group of benchmark communities. This report also identifies approaches and strategies that other communities have used that may provide useful guidance for Danville to maximize the positive benefits or mitigate the negative impacts.

At the writing of this report, studies commissioned by the City of Danville and the Joint Legislative Audit and Review Commission were not yet released.

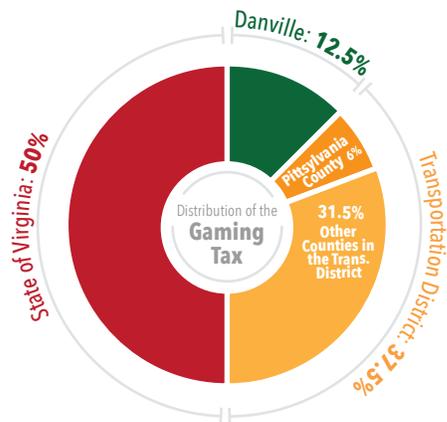
# WHAT IF DANVILLE BETS ON A CASINO?



## THERE IS A BROAD RANGE OF POSSIBLE IMPACTS...

	PEOPLE ATTRACTED	SPENDING	JOBS SUPPORTED	WAGES
 A casino developed in Danville could be relatively <b>small</b> ...	 180K - 367K	 \$55 M	 575	 \$12.7M
 or it could be relatively <b>large</b> !	 1M - 2.1M	 \$315 M	 3,050	 \$68.4M
	A casino will attract tourism and visitors to Danville. Estimates refer to annual visitors.	Those visitors will spend money in Danville, both at the casino and at other businesses.	The development and ongoing operation of a casino will support local employment.	People employed at the Casino will receive wages. Their income will then enter the local economy.

## TAX IMPACTS | WHO BENEFITS?



◀ The **Gaming Tax** could be distributed as shown to the left. The amount of Gaming Tax that comes to **Danville** following the development of a casino could be anywhere **between \$625,000 and \$5.6 Million** annually, depending on the rate of tax and amount of casino activity.

### Other Tax Impacts in Danville: \$2.6M - \$3.5M

In addition to the gaming tax, a casino would contribute to a variety of other municipal taxes. Current tax rates in Danville are shown below:

<b>Real Estate Tax:</b> 0.84% of business property value	<b>Meals:</b> 6.5% local tax on food and drinks	<b>Lodging:</b> 8% + \$2 of the total for hotel or motel rooms	<b>Sales:</b> 1% local sales tax
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**TOTAL TAX IMPACTS IN DANVILLE: \$3.2M - \$9.1M**

## SOCIAL IMPACTS | WHO PAYS?

**8% OF CRIME**

The most comprehensive national study found that **8% of crime in casino counties was attributable to casinos.**<sup>1</sup> In further research, benchmark communities with casinos were found to have an additional 765 property crimes and 50 violent crimes per 100,000 people annually.

**\$3.2 MILLION**

Estimates suggest that **problem gambling behavior would affect more than 2,200 Danville and Pittsylvania residents**, with a social cost to the area of \$3.2 million annually.<sup>2</sup>

**<\$15 PER HOUR**

**Nationally, two-thirds of the casino workforce earns an average wage of less than \$15 per hour.**<sup>3</sup> The majority of casino workers in Danville would likely earn less than a living wage.

1. Grinols, Earl and David Mustard. "Casinos, Crime, and Community Costs." The MIT Press. 2006.

<https://www.mitpressjournals.org/doi/10.1162/rest.2006.88.1.28>.

2. "Gambling Impact and Behavior Study." National Opinion Research Center at the University of Chicago. 1999.

<http://www.norc.org/PDFs/publications/GIBSFinalReportApril1999.pdf>

3. Bureau of Labor Statistics (BLS), 2018 annual wage data

All other figures are based on research by Fourth Economy Consulting.



To view the full report, please visit [www.drfonline.org](http://www.drfonline.org).

## Infographic Narrative

**Startup / Low Estimated Tax Revenue for Danville:** At a 10 percent state tax rate, Danville could receive **\$625,000 in gaming tax revenue** from a casino with \$50 million in pre-tax net gaming revenue. Real estate taxes and taxes from related operations would increase this amount to **\$3.2 million in total annual taxes to Danville**. (Pages 9, 21-25)

**Mature / High Estimated Tax Revenue for Danville:** At a 15 percent tax rate, Danville could receive **\$5.6 million in gaming tax revenue** from a casino with \$300 million in pre-tax net gaming revenue. Real estate taxes and taxes from related operations would increase this amount to **\$9.1 million in total annual taxes to Danville**. (Pages 10, 22-26)

**Visitor Attraction:** Danville will need **183,333 to 2.1 million** visits to generate the estimated casino revenues. This equates to a range of 500 to nearly 6,000 daily casino visits. (Pages 15, 43-48)

**Tax Revenues Will Be Shared:** Danville will absorb the negative impacts, but tax revenue will go to other communities and the state. Depending on the tax rate and casino revenues, the Lynchburg Transportation District could receive **\$1.9 million to \$16.9 million** in annual taxes, and the state of Virginia could receive **\$2.5 million to \$22.5 million** in annual taxes from the Danville casino. (Pages 26-29)

**Wages for Casino Jobs:** Nationally casinos pay an average wage of **\$15.75 per hour**, but two thirds of the workers earn an average wage less than \$15 per hour. The majority of casino workers in Danville would likely earn less than a living wage. The casino jobs will greatly **increase the wages** for workers in jobs that require similar levels of training, such as hotels and restaurants and even draw workers from manufacturing. Existing businesses may need to raise wages to compete for workers. (Pages 12, 30-35)

**Jobs:** A small casino would create **575 jobs** with a total wage impact of **\$12.7 million**. A large casino would create **3,050 jobs** with a total wage impact of **\$68.4 million**. (Pages 11, 29-30)

**Crime:** The most comprehensive and only national study found that **8 percent** of crime observed in casino counties was attributable to casinos. Benchmark communities with casinos had an **additional 765 property crimes** and an **additional 50 violent crimes** per 100,000 population compared to other counties in their state. (Pages 16-17, 49-54)

**Problem Gambling:** The estimated annual social costs of problem gambling behavior would impact **2,200 Danville and Pittsylvania residents** for nearly **\$1.3 million for annual social costs in Danville** and **\$1.9 million in Pittsylvania**. (Pages 17, 55-56).

## Methodology and Assumptions

A recent report by Chmura Economics & Analytics projected a potential best case scenario for the impact of a new casino complex in Danville, VA. That study, referred to as the Bristol report, is one possible outcome. This study provides alternative estimates, not to challenge the findings of the Bristol report, but to demonstrate there is a range of possible impacts.

The first factor that will influence the findings of any economic impact report are the assumptions on which those findings are based. Table 0.1 below compares the assumptions used in this report and the Bristol report. This report considered two potential state tax rates (10 percent and 15 percent) based on proposed legislation in 2019, and three scenarios for casino revenues, from a low estimate of \$55 million in total casino revenues to a high of \$315 million in total casino revenues. For simplicity, the table below does not show the mid-range revenue assumption in this study.

Table 0.1: Comparison of Assumptions

<b>Revenue Assumptions</b>	<b>Low</b>	<b>High</b>	<b>Bristol</b>
Pre-Tax Net Gaming Revenue	\$50,000,000	\$300,000,000	\$600,000,000
Casino Non-Gaming Revenues	\$5,000,000	\$15,000,000	\$289,700,000
<b>Casino Total Revenues</b>	<b>\$55,000,000</b>	<b>\$315,000,000</b>	<b>\$889,700,000</b>
<b>Visitor Assumptions</b>	<b>Low</b>	<b>High</b>	<b>Bristol</b>
Visitors	183,333	6,300,000	4,000,000
<b>Comparison of Impacts</b>	<b>Low</b>	<b>High</b>	<b>Bristol</b>
Total Direct Employment	575	3,050	5,426
<b>Total Estimated Tax Revenue to Danville</b>	<b>\$3,230,953</b>	<b>\$9,130,264</b>	<b>\$20,300,000</b>

The use of lower revenue assumptions was based on the range of experience found in casinos in a set of benchmark regions. These casinos and regions were chosen because they reflected different operating conditions within regions that shared some characteristics with Danville - a range of sizes, demographics and market locations. See the profiles of the benchmark communities on page 58 for more information.

## Executive Summary

As the legalization of gaming has expanded over the last decade, communities across the country have claimed some of the billions of dollars in newly-generated gaming revenues. Casinos have contributed positive benefits such as increased tax revenues and economic activity, but they are not a golden ticket. Some communities have realized fewer benefits or found that the benefits are outweighed by a variety of negative impacts. This analysis provides the **potential positive and negative** impacts so that the Danville community can determine which impacts are significant and likely to happen.

The summary of findings below is organized by the following topics: Taxes and Revenues, Job Creation, Job Quality, Development Impacts, Tourism, and Social Impacts. Each section presents the findings, as well as other factors to consider.

## Taxes and Revenues - Key Findings

Potential tax revenue is a critical concern driving support for casinos in many communities. For Danville, the tax revenue will ultimately depend on how many visitors the casino attracts, how much they spend, and the tax rates set by the Virginia legislature.

What are the total expected new revenues at a 10 percent state tax rate?

The low estimate may reflect the startup period of the casino or later years if gambling expands to other locations in Virginia or North Carolina and erodes the potential market. The high estimate would rank the Danville casino near the top of the benchmark casinos. At a ten percent statewide tax rate, the casino and related operations would generate an estimated **\$3.2 million to \$7.3 million** in direct tax revenue per year to Danville. These amounts are significant but much less than the revenues to the state. See page 25 for more information.

Table 1.1: Projected Total Direct Tax Revenue to Danville at 10 Percent Tax Rate

Revenue to Danville at 10% Tax Rate	Low	Mid	High
<b>Casino Gaming + Non-Gaming Revenue</b>	<b>\$55,000,000</b>	<b>\$160,000,000</b>	<b>\$315,000,000</b>
Casino Gaming Tax Revenue	\$625,000	\$1,875,000	\$3,750,000
Casino Non-Gaming Revenue	\$2,785,000	\$3,676,500	\$4,603,000
Total Diversion and Tax Offset	-\$179,047	-\$538,743	-\$1,097,736
<b>Total Estimated Casino &amp; Related Tax Revenue to Danville</b>	<b>\$3,230,953</b>	<b>\$5,012,757</b>	<b>\$7,255,264</b>

What are the total expected new revenues at a 15 percent state tax rate?

At a fifteen percent statewide tax rate, the casino and related operations would generate an estimated **\$3.5 million to \$9.1 million** in direct revenue per year to Danville. See page 26 for more information.

Table 1.2: Projected Total Direct Tax Revenue to Danville at 15 Percent Tax Rate

<b>Revenue to Danville at 15% Tax Rate</b>	<b>Low</b>	<b>Mid</b>	<b>High</b>
<b>Casino Gaming + Non-Gaming Revenue</b>	<b>\$55,000,000</b>	<b>\$160,000,000</b>	<b>\$315,000,000</b>
Casino Gaming Tax Revenue	\$937,500	\$2,812,500	\$5,625,000
Casino Non-Gaming Revenue	\$2,785,000	\$3,676,500	\$4,603,000
Total Diversion and Tax Offset	-\$179,047	-\$538,743	-\$1,097,736
<b>Total Estimated Casino &amp; Related Tax Revenue to Danville</b>	<b>\$3,543,453</b>	<b>\$5,950,257</b>	<b>\$9,130,264</b>

How much revenue would the transportation district get at each tax rate?

This analysis assumed the distribution of revenue in the proposed legislation SB 1706, which distributed a portion of the gaming revenue to the transportation district where the casino is located.<sup>1</sup> There are no guidelines yet on how these revenues might be distributed within the transportation district, so this analysis assumed that revenues would be distributed based on the population of the transportation district, excluding the host community because Danville would receive a dedicated percentage according to the language in the proposed SB 1706. These funds would be needed to offset the costs for road maintenance and construction to support the increased traffic in the region. For more information about the transportation district and the methodology for the estimate, see page 26.

Table 1.3: Projected Funding to the Transportation District

<b>Transportation District Funding</b>	<b>Pre-Tax Net Gaming Revenue Only</b>		
	<b>\$50,000,000</b>	<b>\$150,000,000</b>	<b>\$300,000,000</b>
<b>10 Percent</b> State Tax Rate	\$1,875,000	\$5,625,000	\$11,250,000
<b>15 Percent</b> State Tax Rate	\$2,812,500	\$8,437,500	\$16,875,000

<sup>1</sup> Danville is located in Transportation District 3, which includes 10 counties: Amherst, Appomattox, Buckingham, Campbell, Charlotte, Cumberland, Halifax, Nelson, Pittsylvania and Prince Edward; and 2 independent cities: Danville and Lynchburg.

## Job Creation - Key Findings

Estimating the new jobs from the proposed casino is highly speculative without a specific development plan and operator. These job impacts were estimated from the benchmark communities and from an input-output model<sup>2</sup> with different revenue assumptions for the casino to provide a range of potential impacts.

Table 1.4: Job Impacts Based on Total Casino Revenue

<b>Low: Jobs at \$55 Million in Total Casino Revenue</b>			
<b>Impact</b>	<b>Casino Jobs</b>	<b>Related Jobs</b>	<b>Total Jobs</b>
1 - Direct	375	200	575
2 - Indirect	119	37	155
3 - Induced	51	22	73
<b>High: Jobs at \$315 Million in Total Casino Revenue</b>			
<b>Impact</b>	<b>Casino Jobs</b>	<b>Related Jobs</b>	<b>Total Jobs</b>
1 - Direct	2,300	750	3,050
2 - Indirect	727	138	865
3 - Induced	312	83	395

Source: IMPLAN model. Analysis by Fourth Economy.

The IMPLAN model for the Danville region for a casino with **\$55 million** in total revenue results in an estimate of 375 jobs in the casino and 200 jobs in the related hotel and restaurant operations, for a total job impact of **575 jobs**. An additional 155 jobs could result from the businesses that supply the casino (indirect), plus another 73 jobs from the local spending of the workers employed in direct and indirect jobs (induced). If the casino grows to **\$315 million** in total revenue, then it would employ an estimated 2,300 people in the casino and 750 in the related operations, for a total impact of **3,050 jobs**. An additional 865 jobs could result from the indirect effects and 395 jobs could result from the induced effects. See page 29 for more information.

Would a casino compete with existing businesses for workers?

At an hourly wage of \$15 per hour, the benchmark average, the casino would be attractive to workers in accommodation and food services. At \$22 per hour, the casino would be attractive to those workers as well as workers in Danville’s manufacturing industry, where the average wage is \$22.52. See page 30 for more information.

<sup>2</sup> This analysis used an IMPLAN model for Danville, Pittsylvania and Caswell counties.

## Job Quality - Key Findings

Gambling industries **pay more than other accommodation and recreation industries**, but **less than the average earnings** for all industries in Danville. Earnings in gambling industries range from **\$10 per hour in West Virginia** to nearly **\$18 per hour in New York**. On average, the hourly earnings in the gambling industry (\$15) are 57 percent of the average earnings for all industries in the benchmark communities (\$26). The average hourly earnings in Danville are lower than the average for the benchmark communities. If gambling jobs in Danville pay 57 percent of the average wage in Danville, then these jobs would pay **\$9.64 to \$11.18 per hour**. See page 31 for more information.

Table 1.5: Hourly Earnings by Industry

Hourly Earnings	Other Accommodation & Recreation	Gambling Industries	Average Earnings - All Industries
Benchmark Average	\$10.90	\$14.92	\$26.16
Danville	\$7.97	\$11.18	\$19.61
Pittsylvania	\$8.02	\$10.36	\$18.17
Caswell	\$6.73	\$9.64	\$16.91

Source: Quarterly Workforce Indicators. State averages are included because industry pay data for some benchmark counties is not disclosed in all cases due to confidentiality requirements. Earnings includes wages, tips and bonuses but not benefits.<sup>3</sup> Danville earnings are estimated.

The average hourly earnings obscure the variation in how much people can earn in different jobs within the gambling industry. The national profile of occupations within the gambling industry provides some insight into the distribution of jobs and wages that can be expected. The most common gambling industry occupations include gaming service workers, first-line supervisors of gaming workers, food preparation and service, office and administrative support, cashiers, security guards, and building cleaning workers.

**Nationally, 67 percent of the jobs in gambling pay average wages of less than \$15 per hour:** Service workers and attendants are **29 percent** of the jobs and earn an average of **\$14.37**. Food preparation workers are **21 percent** of the jobs and earn an average of **\$12.84**. See page 32 for more information.

<sup>3</sup> Earnings include gross wages and salaries, bonuses, stock options, tips, and other gratuities, and the value of meals and lodging, where supplied. It does NOT include Old Age Survivor and Disability Insurance, health insurance, workers compensation, unemployment insurance, private pensions, and welfare funds. Earnings may also be affected by the number of hours worked. For more information about earnings data, see [https://lehd.ces.census.gov/doc/Metadata4\\_QWI.htm](https://lehd.ces.census.gov/doc/Metadata4_QWI.htm).

Table 1.6: Quarterly Turnover Rates by State and Industry

	All Industries	Gambling Industries	Restaurants and Other Eating Places	Traveler Accommodation	Performing Arts Companies	Other Amusement & Recreation Industries
Indiana	9%	8%	15%	15%	14%	17%
Iowa	8%	9%	16%	13%	13%	17%
Missouri	9%	9%	16%	14%	17%	13%
New York	8%	8%	15%	10%	17%	16%
West Virginia	9%	13%	16%	13%	17%	18%
<b>Grand Total</b>	<b>9%</b>	<b>9%</b>	<b>16%</b>	<b>13%</b>	<b>15%</b>	<b>16%</b>

Source: Quarterly Workforce Indicators

On the positive side, gambling jobs have **higher average earnings for jobs with similar levels of training**, which can benefit disadvantaged populations and the under-employed. Furthermore, the rates of turnover (the proportion of workers that are new to the job each quarter) in gambling industries are generally comparable to statewide averages. Of the benchmark communities examined, West Virginia is the exception. From the perspective of the worker, jobs with **low turnover** and **smaller seasonal variations** are **more stable and predictable**. See page 38 for more information.

## Development Impacts - Key Findings

There is mixed evidence about the development impacts of casinos and other large visitor attractions. This report highlights the experiences of other communities to provide insight as to how Danville could manage the development of a new casino. In the benchmark communities studied for this report, there are as many cases where the areas around the casino added jobs as there were areas that lost jobs. If casinos have a positive spillover effect on other businesses, we would expect to see a more consistent pattern in the job growth near the casinos. See page 43 for more information.

- In Shelbyville, jobs in the area around the casino grew, but the only nearby businesses are the casino and the airport.
- In Dubuque, jobs in the area around the Diamond Jo casino have grown as part of a larger redevelopment strategy.
- In Dubuque, the area around the Q Casino has lost jobs even though Dubuque has been growing.
- In Monticello, the community is losing jobs and the area around both the Monticello Raceway and Casino (now closed) is losing jobs.

- In St. Joseph, the area around the casino has lost jobs even though St. Joseph is growing.

Table 1.7: Development in Casino Communities

Casino (Reported Casino Employment)	Casino Neighborhood (1.5 Miles)				Community
	2012 Jobs	2017 Jobs	Change 2002-17	Percent Change 2002-17	Percent Change 2002-17
<b>Growth in the casino and the community</b>					
Dubuque - Diamond Jo Casino (250-500)	15,881	17,276	1,395	9%	10%
Shelbyville - Indiana Grand Racing & Casino (800-1,200)	828	2,105	1,277	154%	3%
<b>Growth near the casino, but the community declined</b>					
Charles Town - Hollywood Casino at Charles Town Races (1,000-1,500)	5,891	7,127	1,236	21%	-11%
<b>Decline near the casino and in the community</b>					
Monticello - Monticello Raceway (150-300)	3,561	1,267	-2,294	-64%	-35%
Monticello - Resorts World Catskills (1,000-1,200)	849	399	-450	-53%	-35%
<b>Decline near the casino, but the community grew</b>					
St. Joseph - St. Jo Casino (200-300)	1,486	935	-551	-37%	20%
Dubuque - Q Casino (300-500)	8,641	7,828	-813	-9%	10%

Source: Community employment from the Longitudinal Employment Household Dynamics. Casino employment from state gaming reports, news reports and top employment lists.

There are many factors that have influenced the development experience of these casino communities. The proximity and connectivity of the casino to the surrounding area influences whether there are positive spillovers. Casinos that are closer and better connected to other assets tend to have more positive spillovers. Leveraging the presence of a casino requires a development plan and a series of strategic investments that, when **combined**, can generate economic benefits. The primary example is the Diamond Jo Casino and Dubuque’s Master Redevelopment Plan. See page 71 for more information.

Whether the casino complements or competes with local businesses depends on the ability of the casino to draw visitors beyond the local area and whether the casino is isolated and all-inclusive. The estimates of how much local spending is diverted from other businesses to the casino range from **30 percent to 75 percent**<sup>4</sup> but the studies are not specific about what factors influence the revenue diversion. See pages 24-25 for more information.

Table 1.8: Spillover Benefits of Casino

	<b>Casino is isolated and all-inclusive</b>	<b>Casino is embedded with complementary businesses</b>
<b>Casino patrons are primarily local residents</b>	Casino competes with local businesses	Casino provides limited spillover benefits to other businesses
<b>Casino patrons are not local residents</b>	Casino provides limited spillover benefits to other businesses	Greatest potential for positive spillover benefits

## Tourism - Key Findings

Given the locations of existing casinos in other states and the proposed locations in Virginia, the Danville location is expected to draw visitors from within a 100-mile area. Danville has nearly 5.4 million people within 100 miles, which would rank it as the third smallest market among the benchmark regions. Since gambling is an age-restricted activity, the primary market would be approximately **4.4 million adults** who are 18 years or older and live within 100 miles of the proposed casino. See pages 43-44 for more information.

A Danville casino would need a minimum of nearly **183,333 visits**<sup>5</sup> to sustain a casino of **\$55 million** in total revenue if those visitors spent **\$300 per visit**. The Danville casino would need **2.1 million visits**, with spending of **\$150 per visit**, to sustain **\$315 million** in total revenues. At \$300 per visit, a Danville casino would need to capture only **4 percent**

<sup>4</sup> The Regional Economic Impacts Of Casino Gambling: Assessment Of The Literature And Establishment Of A Research Agenda. 1998. Adam Rose & Associates, National Gambling Impact Study Commission, Washington, DC., pages 1, 24. See also: Review of the Casino Literature With Special Emphasis on a Casino's Affect on the Local Community. 2009. Prepared for the City of Fort Wayne, Community Research Institute, pages 6-8.

<sup>5</sup> Visits equates to total customer visits, which may include repeat visits from some customers.

of the primary market of 4.4 million adults within 100 miles to sustain a \$55 million casino. In order to sustain a \$315 million annual casino, the casino would have to capture **24 percent** of the adults within 100 miles, and they would have to spend \$300 per visit. If the visitors spend \$150 per visit, then the casino would need to capture **47 percent** of the potential market. Gallup reports that **26 percent** of Americans visited a casino.<sup>6</sup> Based on this estimate, any market shares of 26 percent or below may be feasible. See pages 43-45 for more information.

Table 1.9: Required Market Shares

	Total Gaming and Non-Gaming Revenue		
	\$55,000,000	\$160,000,000	\$315,000,000
Spending per Visit	Estimated Market Share of Adult Population		
\$150	8%	24%	47%
\$300	4%	12%	24%

A casino has to be integrated into a broader tourism and visitor strategy in order to be successful. Furthermore, the strategy must identify how to adapt to changing consumer preferences driven by demographics and economic cycles. See page 46 for more information on how demographic and economic conditions impact the ability of a casino to attract visitors.

## Social Impacts - Key Findings

Taxes, jobs, and other economic benefits aren't the only outcomes associated with local casino development. Counties and regions are often not prepared for the unintended social costs that can accompany casino activity.<sup>7</sup> How the legalization of gambling and proximity of a casino might impact the community and/or its residents will depend on the unique characteristics, resources, and social infrastructure of that community. Even though these social impacts are harder to quantify, they deserve consideration equal to the economic impacts. See page 49 for more information.

Crime increases related to casinos are generally the result of the increased visitor volume and increased level of activity. The most comprehensive and only national study that examined the connection between casinos and crime compared counties with and

<sup>6</sup> Setyon, Joe. "Gallup: Nearly Two-Thirds of Americans Admit They Gamble," July 25, 2016, available from: <https://www.cnsnews.com/blog/joe-setyon/gallup-nearly-two-thirds-americans-admit-they-gambled-last-year>.

<sup>7</sup> Note that some of these impacts, such as crime, may occur with any development that attracts large numbers of visitors.

without casinos from 1977 and 1996 and estimated that **8 percent** of crime observed in casino counties was attributable to casinos.<sup>8</sup> The largest increases were in robbery, auto theft and aggravated assault in the years after a casino opened. See page 49 for more information.

The benchmark communities with casinos have higher crime rates compared to their host state. On average, the benchmark communities exhibit an **additional 765 property crimes** per 100,000 population and an **additional 50 violent crimes** per 100,000 population. See pages 51-53 for more information.

Research has shown that there are **modest increases in bankruptcies** in new casino jurisdictions. There is also a direct correlation with the casino life cycle: the longer the casino exists, the greater the increase in bankruptcy over the long-term. See page 55 for more information.

The estimated annual social costs of problem gambling behavior would impact an estimated **2,200 Danville and Pittsylvania residents** amounting to nearly **\$1.3 million for social costs in Danville** and **\$1.9 million in Pittsylvania**. Social costs include productivity losses, social services, and creditor losses. Social costs are not paid directly by the municipality, but are spread to employers, social service providers, and individuals. See pages 55-57 for more information.

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<sup>8</sup> Grinols, Earl and David Mustard. "Casinos, Crime, and Community Costs." The MIT Press. 2006. <https://www.mitpressjournals.org/doi/10.1162/rest.2006.88.1.28>.

## Detailed Findings

### Estimating Taxes and Revenues

How were the tax impacts estimated?

The state has not determined the tax rates that will govern casino gaming revenue or how that revenue will be split between jurisdictions. Given the unknowns, this analysis has assumed different scenarios to estimate the tax revenues that result from the casino and related operations, including the gaming tax, sales tax, meals tax, transient lodging tax, and real estate tax.

In order to estimate the tax impacts, Fourth Economy examined the revenues for the benchmark casinos and estimates of the Danville local market to determine the potential revenues from casino operations in Danville. Then we used the proposed tax rates and revenue distribution outlined in SB 1706:

SB 1076 indicated a state gaming tax rate of 10 percent, but some sources have cited a rate of 15 percent. Both rates were used in our estimates, distributed as follows:

- Half of the proceeds from the tax rate shall be deposited by the Comptroller as follows:
  - One percent of this amount to the Problem Gambling Treatment and Support Fund
  - Fifty percent to the Virginia Public School Construction Grants Program
  - The remainder shall be paid into the General Fund
- Half of the proceeds from the tax rate shall be deposited to the State Local Casino Gaming Proceeds Fund. Expenditures from the Fund shall be made to each locality in which casino gaming establishments are located in proportion to the quarterly adjusted gross receipts tax:
  - Twenty-five percent to the city in which a casino gaming establishment is located; and
  - Seventy-five percent to be divided equally among those localities in the transportation district.<sup>9</sup>

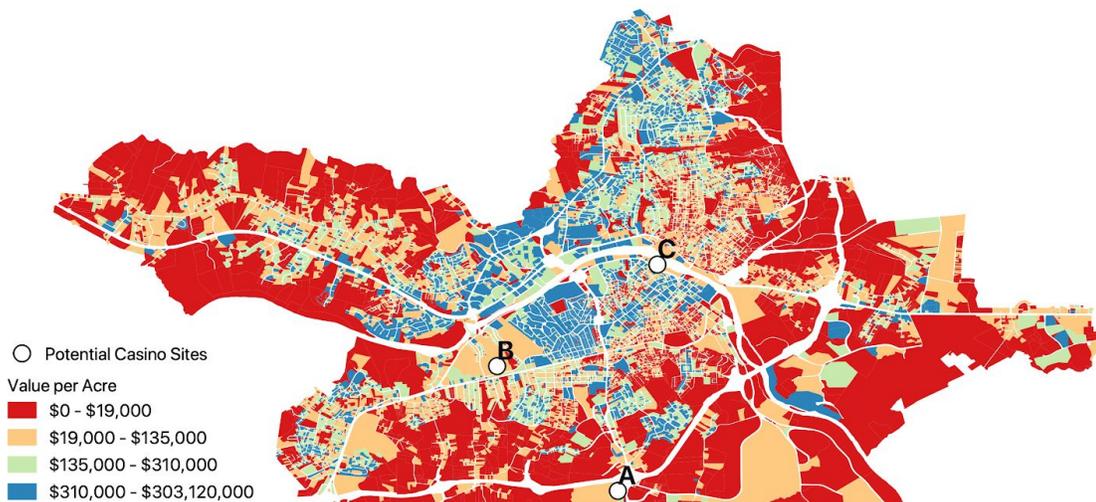
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<sup>9</sup> Danville is located in Transportation District 3, which includes 10 counties--Amherst, Appomattox, Buckingham, Campbell, Charlotte, Cumberland, Halifax, Nelson, Pittsylvania and Prince Edward--and 2 independent cities, Danville and Lynchburg.

The tax impacts will also include other taxes associated with the casino hotel, such as food and beverage sales, hotel revenues, and property taxes.

- Sales Taxes
  - Virginia = 4.3%; Danville = 1%
- Food and Lodging Tax
  - Meals Tax = 6.5% of the cost of meals and/or drinks
  - Transient Lodging Tax = 8% + \$2 of the total amount paid for the rental of any room in a hotel/motel
- Real Estate Taxes
  - Property values will impact the taxes from the casino development, absent any tax exemptions or abatements. Casino properties in the benchmark communities had property values from \$39,000 to \$450,000 per acre. Commercial properties in Danville range from \$31,111 per acre at the 25th percentile and \$493,671 per acre at the 75th percentile.
  - The primary driver in estimating the property taxes was assumed to be the \$200 million investment that is a requirement of proposed legislation SB 1126.<sup>10</sup> How much the real estate taxes increase beyond the baseline is a function of whether a site is chosen in a lower or higher value location in Danville. See [Figure 2.1: Total Land Values per Acre in Danville \(All Land Uses\)](#) for a range of potential locations.

Figure 2.1: Total Land Values per Acre in Danville (All Land Uses)



Source: <http://data-danvillegis.opendata.arcgis.com/>, analysis by Fourth Economy.

<sup>10</sup> SB 1126, Chapter 41. Casino Gaming, § 58.1-4100. Conduct of casino gaming; limitation. Section C. Full text is available here: <https://lis.virginia.gov/cgi-bin/legp604.exe?191+ful+CHAP0789>.

## How do tax rates compare in other states and communities?

Virginia’s proposed statewide tax rate of 10 percent to 15 percent is significantly below what other states have enacted. The casinos and states examined for this report have state tax rates that range from 23 percent to nearly 47 percent.

Table 2.1: Overview of Benchmark Casino Communities

	<b>Shelbyville, IN</b>	<b>St. Joseph, MO</b>	<b>Monticello, NY</b>	<b>Charles Town, WV</b>	<b>Dubuque, IA</b>	<b>Danville, VA</b>
<b>Pre-Tax Net Gaming Revenues of the Casino</b>	\$276 M	\$43 M	\$30 M	\$336 M	\$117 M	\$50M - \$300M (Estimated)
<b>Population within 100 miles</b>	7,825,560	2,949,622	23,975,385	11,841,556	2,965,374	5,398,879
<b>State Tax Rate</b> (Total State Casino Tax Revenue / Statewide Pre-Tax Net Gaming Revenue)	26.9%	25.7%	43.5%	46.9%	23.0%	10 - 15% (Proposed)

## How much revenue have casinos in similar communities generated?

The casinos in these communities have pre-tax net gaming revenues that range from **\$30 million** for the now-closed Monticello Casino and Raceway, which is less than 2 hours from New York City and has nearly 24 million people within 100 miles, to **\$336 million** for the Hollywood Casino at Charles Town Races, with a population of nearly **12 million people** within 100 miles. For the Danville casino, the revenues were estimated based on pre-tax net gaming revenues that range from \$50 million to \$300 million. These ranges fit within the observed range for the benchmark communities.

The low estimate of **\$50 million** may reflect early operating years before the facility reaches full capacity, or, like the casinos in Monticello and St. Joseph, it may reflect the stabilized revenue over the long term based on competition from other facilities within and outside of Virginia. If a casino were to open in Danville, it is very likely to achieve the lower estimate, but it may be less likely to generate **\$300 million** or more in gaming revenues. These estimates therefore provide some realistic benchmarks that can be used to evaluate the revenue potential of a new full-service casino.

How much revenue will Danville receive based on a 10 percent state tax rate?

Based on a tax rate of 10 percent, Danville would get \$625,000 to \$3.75 million in annual taxes from the gaming operations of the casino ([Table 2.2: Projected Distribution of Gaming Taxes at 10% Tax Rate](#)). This equates to an effective local tax rate of 1.3 percent of the pre-tax net gaming revenues compared to an average of 2 percent for the benchmark host communities (See [Table 2.4: Comparison of Local Effective Gaming Tax Rates](#)). While this revenue is significant, it is 25 percent of the amount that will go to the state and 33 percent of the revenue that will go to the rest of the transportation district<sup>11</sup> according to the proposed legislation SB 1706<sup>12</sup>, even though the majority of the impacts will be in Danville.

Table 2.2: Projected Distribution of Gaming Taxes at 10% Tax Rate

Casino Gaming Revenues (Tax Rate of 10%)	Estimated Pre-Tax Net Gaming Revenue		
	\$50,000,000	\$150,000,000	\$300,000,000
Projected Total Casino Taxes	\$5,000,000	\$15,000,000	\$30,000,000
<b>Projected Revenue to State Funds</b>	<b>\$2,500,000</b>	<b>\$7,500,000</b>	<b>\$15,000,000</b>
Virginia General Fund	\$1,225,000	\$3,675,000	\$7,350,000
Problem Gaming and Treatment Fund	\$25,000	\$75,000	\$150,000
Virginia Public School Construction Grants Program	\$1,250,000	\$3,750,000	\$7,500,000
Local Casino Gaming Proceeds Fund	\$2,500,000	\$7,500,000	\$15,000,000
<b>Projected Revenue to Danville</b>	<b>\$625,000</b>	<b>\$1,875,000</b>	<b>\$3,750,000</b>
Projected Revenue to Transportation District	\$1,875,000	\$5,625,000	\$11,250,000
<b>Projected Revenue to Pittsylvania County</b>	<b>\$326,840</b>	<b>\$980,521</b>	<b>\$1,961,042</b>
Projected Revenue to Remainder of Transportation District	\$1,548,160	\$4,644,479	\$9,288,958

<sup>11</sup> Danville is located in Transportation District 3, which includes 10 counties--Amherst, Appomattox, Buckingham, Campbell, Charlotte, Cumberland, Halifax, Nelson, Pittsylvania and Prince Edward--and 2 independent cities, Danville and Lynchburg.

<sup>12</sup> SB 1706, Article 8 Taxation, § 58.1-4124. Wagering tax; rate; state and local distribution. Sections A and B. Access full text of the legislation here: <https://lis.virginia.gov/cgi-bin/legp604.exe?191+ful+SB1706>.

How much revenue will Danville receive based on a 15 percent state tax rate?

Based on a tax rate of 15 percent, Danville would get \$937,500 to \$5.63 million annually in taxes from the gaming operations of the casino (See [Table 2.3: Projected Distribution of Gaming Taxes at 15% Tax Rate](#)). This equates to an effective local tax rate of 1.9 percent of the pre-tax net gaming revenues compared to an average of 2 percent for the benchmark host communities (See [Table 2.4: Comparison of Local Effective Gaming Tax Rates](#)). While this revenue is significant, it is 25 percent of the amount that will go to the state and 33 percent of the revenue that will go to the rest of the transportation district<sup>13</sup> according to proposed legislation SB 1706<sup>14</sup>, even though the majority of the impacts will be in Danville.

Table 2.3: Projected Distribution of Gaming Taxes at 15% Tax Rate

Casino Gaming Revenues (Tax Rate of 15%)	Estimated Pre-Tax Net Gaming Revenue		
	\$50,000,000	\$150,000,000	\$300,000,000
Projected Total Casino Taxes	\$7,500,000	\$22,500,000	\$45,000,000
<b>Projected Revenue to State Funds</b>	<b>\$3,750,000</b>	<b>\$11,250,000</b>	<b>\$22,500,000</b>
Virginia General Fund	\$1,837,500	\$5,512,500	\$11,025,000
Problem Gaming and Treatment Fund	\$37,500	\$112,500	\$225,000
Virginia Public School Construction Grants Program	\$1,875,000	\$5,625,000	\$11,250,000
Local Casino Gaming Proceeds Fund	\$3,750,000	\$11,250,000	\$22,500,000
<b>Projected Revenue to Danville</b>	<b>\$937,500</b>	<b>\$2,812,500</b>	<b>\$5,625,000</b>
Projected Revenue to Transportation District	\$2,812,500	\$8,437,500	\$16,875,000
<b>Projected Revenue to Pittsylvania County</b>	<b>\$490,260</b>	<b>\$1,470,781</b>	<b>\$2,941,562</b>
Projected Revenue to Remainder of Transportation District	\$2,322,240	\$6,966,719	\$13,933,438

<sup>13</sup> Danville is located in Transportation District 3, which includes 10 counties: Amherst, Appomattox, Buckingham, Campbell, Charlotte, Cumberland, Halifax, Nelson, Pittsylvania and Prince Edward; and 2 independent cities: Danville and Lynchburg.

<sup>14</sup> SB 1706, Article 8 Taxation, § 58.1-4124. Wagering tax; rate; state and local distribution. Sections A and B. Access full text of the legislation here: <https://lis.virginia.gov/cgi-bin/legp604.exe?191+ful+SB1706>.

Table 2.4: Comparison of Local Effective Gaming Tax Rates

<b>Local Effective Gaming Tax Rates (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)</b>	
City of Dubuque (+ other Q Casino revenues)	6.9%
St. Joseph, MO	2.2%
<b>Danville (15% Tax Rate)</b>	<b>1.9%</b>
<b>Danville (10% Tax Rate)</b>	<b>1.3%</b>
Shelbyville, IN	1.2%
Monticello, NY	1.0%
City of Dubuque (Tax Only)	0.5%
Charles Town, WV	0.3%
<b>Average (excluding Danville)</b>	<b>2.0%</b>

Note: The City of Dubuque owns the Q Casino and has non-tax revenue as a result.

How much tax revenue will be generated from related operations?

Table 2.5: Estimated Taxes from Related Operations

<b>Casino Non-Gaming Revenues</b>	<b>Low</b>	<b>Mid</b>	<b>High</b>
<b>Pre-Tax Net Gaming Revenue</b>	<b>\$50,000,000</b>	<b>\$150,000,000</b>	<b>\$300,000,000</b>
Estimated Additional Restaurant Sales	\$3,000,000	\$6,000,000	\$9,000,000
Estimated Additional Hotel Sales	\$2,000,000	\$4,000,000	\$6,000,000
<b>Total Gaming + Non-Gaming Revenue</b>	<b>\$55,000,000</b>	<b>\$160,000,000</b>	<b>\$315,000,000</b>
<b>Estimated Related Taxes for Danville</b>			
<b>Real Estate Tax</b>	<b>\$1,680,000</b>	<b>\$1,764,000</b>	<b>\$1,848,000</b>
Business Personal Property Tax	\$700,000	\$1,102,500	\$1,540,000
Meals Tax	\$195,000	\$390,000	\$585,000
Transient Lodging Tax	\$160,000	\$320,000	\$480,000
Sales Tax to Danville	\$50,000	\$100,000	\$150,000
<b>Subtotal Estimated Related Taxes for Danville</b>	<b>\$2,785,000</b>	<b>\$3,676,500</b>	<b>\$4,603,000</b>

The casino will also generate taxes from related operations such as the hotel and restaurant ([Table 2.5: Estimated Taxes from Related Operations](#)). Based on the pre-tax net gaming revenue and on comparable operations, the affiliated restaurant operations at

the casino would generate \$3 million to \$9 million in sales. The hotel operations would generate \$2 million to \$6 million in sales. These related operations will generate Meals, Transient Lodging and Sales Taxes for Danville. The casino will also contribute real estate taxes on the property value and business personal property taxes on the furniture, fixtures and equipment.<sup>15</sup>

How much of these related revenues will be net new revenues?

The casino revenues plus the related revenues from the real estate and related operations would result in a low estimate of \$2.8 million in annual revenue for Danville and a high estimate of \$4.6 million. However, these revenues may be offset if spending on meals, lodging and other retail is diverted from other businesses. Studies have found that the proportion of diverted revenues ranges from 30 percent to 75 percent (See [Table 2.6: Revenue Diversion and Tax Offsets](#)).<sup>16</sup> Studies have also indicated the potential for casinos to reduce residential property values in the vicinity of the casino.<sup>17</sup> Diversion effects could reduce the total revenues to Danville by **-\$141,750 to -\$911,250**.

Table 2.6: Revenue Diversion and Tax Offsets

	<b>Low</b>	<b>Mid</b>	<b>High</b>
<b>Revenue Diversion and Tax Offsets</b>	<b>35%</b>	<b>55%</b>	<b>75%</b>
Meals Tax	<b>-\$68,250</b>	<b>-\$214,500</b>	<b>-\$438,750</b>
Transient Lodging Tax	<b>-\$56,000</b>	<b>-\$176,000</b>	<b>-\$360,000</b>
Sales Tax to Danville	<b>-\$17,500</b>	<b>-\$55,000</b>	<b>-\$112,500</b>
<b>Subtotal of Diversion and Tax Offsets</b>	<b>-\$141,750</b>	<b>-\$445,500</b>	<b>-\$911,250</b>
	<b>Low</b>	<b>Mid</b>	<b>High</b>
<b>Reduced Residential Property Taxes</b>	<b>2%</b>	<b>5%</b>	<b>10%</b>
Reduction in Residential Property Taxes	<b>-\$37,297</b>	<b>-\$93,243</b>	<b>-\$186,486</b>
<b>Total Estimated Diversion and Tax Offsets</b>	<b>-\$179,047</b>	<b>-\$538,743</b>	<b>-\$1,097,736</b>

<sup>15</sup> The furniture, fixtures and equipment for hotel operations ranges from 12 percent to 16 percent of the investment. We have assumed a range of 10 percent to 20 percent of the \$200 million required investment. [https://media.hotelwebservice.com/media/hotour/docs/ff\\_e\\_-\\_the\\_magic\\_formula\\_for\\_hotel\\_operators\\_-\\_a\\_nightmare\\_for\\_investors1.pdf](https://media.hotelwebservice.com/media/hotour/docs/ff_e_-_the_magic_formula_for_hotel_operators_-_a_nightmare_for_investors1.pdf).

<sup>16</sup> The Regional Economic Impacts Of Casino Gambling: Assessment Of The Literature And Establishment Of A Research Agenda. 1998. Adam Rose & Associates, National Gambling Impact Study Commission, Washington, DC., pages 1, 24. See also Review of the Casino Literature With Special Emphasis on a Casino's Affect on the Local Community. 2009. Prepared for the City of Fort Wayne, Community Research Institute, page 6-8.

<sup>17</sup> See Jed Smith, "Economic Impact of Casinos on Home Prices," NAR Research, 2013; Terrence M. Clauretie, Thomas M. Carroll, Nasser Daneshvary, "Rolling the Dice: Would Casinos Harm Illinois Home Values?" Illinois Real Estate Letter, Winter 1998, pages 7-9.

## Why include revenue diversion and tax offsets?

Revenue diversion happens when a new business diverts customers and revenues from existing businesses. If the new business is large, such as a big box store, it may draw customers and revenues from many smaller businesses. The revenue gains for the new business are offset by the losses for existing businesses. Therefore, any tax gains from the new business are also offset by tax losses from existing businesses. If the new business brings in additional customers, and if it does not directly compete with existing businesses, then there may be more customers for existing businesses. These gains depend on whether the new business actively partners with businesses that already exist in the community. The revenue diversion and tax offsets are included in this analysis because they represent a potential adverse outcome. If the revenue gains are positive and significant for the new business even under these adverse assumptions, then there is more confidence that the project will provide benefits for Danville.

## What are the total expected new revenues at a 10 percent state tax rate?

At a ten percent statewide tax rate, the casino and related operations would generate an estimated \$3.2 million to \$7.3 million per year ([Table 2.7: Projected Total Direct Tax Revenue to Danville at 10 Percent Tax Rate](#)). The low estimate may reflect the early operating years of the casino, or later years of operation if gambling expands to other locations in Virginia or North Carolina that erode the potential market. The high estimate would rank the Danville casino near the top of the casinos benchmarked in this study.

Table 2.7: Projected Total Direct Tax Revenue to Danville at 10 Percent Tax Rate

<b>Revenue to Danville at 10% Tax Rate</b>	<b>Low</b>	<b>Mid</b>	<b>High</b>
<b>Casino Gaming + Non-Gaming Revenue</b>	<b>\$55,000,000</b>	<b>\$160,000,000</b>	<b>\$315,000,000</b>
Casino Gaming Tax Revenue	\$625,000	\$1,875,000	\$3,750,000
Casino Non Gaming Revenue	\$2,785,000	\$3,676,500	\$4,603,000
Total Diversion and Tax Offset	-\$179,047	-\$538,743	-\$1,097,736
<b>Total Estimated Casino &amp; Related Tax Revenue to Danville</b>	<b>\$3,230,953</b>	<b>\$5,012,757</b>	<b>\$7,255,264</b>

What are the total expected new revenues at a 15 percent state tax rate?

At a fifteen percent statewide tax rate, the casino and related operations would generate an estimated \$3.5 million to \$9.1 million per year ([Table 2.8: Projected Total Direct Tax Revenue to Danville at 15 Percent Tax Rate](#)).

Table 2.8: Projected Total Direct Tax Revenue to Danville at 15 Percent Tax Rate

<b>Revenue to Danville at 15% Tax Rate</b>	<b>Low</b>	<b>Mid</b>	<b>High</b>
<b>Casino Gaming + Non-Gaming Revenue</b>	<b>\$55,000,000</b>	<b>\$160,000,000</b>	<b>\$315,000,000</b>
Casino Gaming Tax Revenue	\$937,500	\$2,812,500	\$5,625,000
Casino Non Gaming Revenue	\$2,785,000	\$3,676,500	\$4,603,000
Total Diversion and Tax Offset	<b>-\$179,047</b>	<b>-\$538,743</b>	<b>-\$1,097,736</b>
<b>Total Estimated Casino &amp; Related Tax Revenue to Danville</b>	<b>\$3,543,453</b>	<b>\$5,950,257</b>	<b>\$9,130,264</b>

What is the transportation district and how much revenue do they get?

The Virginia Department of Transportation (VDOT) has divided the state into nine transportation districts. Each transportation district oversees the maintenance and construction of the state-maintained highways, bridges and tunnels in its territory.

Figure 2.2: Transportation Districts in Virginia



Source: <https://www.virginiadot.org/about/districts.asp>

For the purposes of this analysis, the proposed legislation SB 1706 included the distribution of revenue to the transportation district where the casino is located. These funds would be needed to offset the costs for road maintenance and construction to support the increased traffic in the region. There are no guidelines on how these revenues might be distributed. This analysis assumed that the revenues would be distributed

based on the population of the transportation district, excluding the host community because Danville would receive a dedicated percentage according to the language in the proposed SB 1706.

Table 2.9: Population of the Transportation District Excluding Danville

County	Population	Share
Amherst County	31,666	9%
Appomattox County	15,841	5%
Buckingham County	16,999	5%
Campbell County	54,973	16%
Charlotte County	11,938	3%
Cumberland County	9,809	3%
Halifax County	34,120	10%
Lynchburg	75,568	22%
Nelson County	14,836	4%
<b>Pittsylvania County</b>	<b>60,949</b>	<b>17%</b>
Prince Edward County	22,950	7%
<b>Transportation District</b>	<b>349,649</b>	<b>100%</b>

Table 2.10: Projected Revenue to Transportation District at 10 Percent Tax Rate

County	Pre-Tax Net Gaming Revenue Only		
	\$50,000,000	\$150,000,000	\$300,000,000
Amherst County	\$169,810	\$509,429	\$1,018,857
Appomattox County	\$84,948	\$254,843	\$509,686
Buckingham County	\$91,157	\$273,472	\$546,945
Campbell County	\$294,794	\$884,382	\$1,768,763
Charlotte County	\$64,018	\$192,053	\$384,107
Cumberland County	\$52,601	\$157,803	\$315,606
Halifax County	\$182,969	\$548,908	\$1,097,815
Lynchburg	\$405,235	\$1,215,705	\$2,431,410
Nelson County	\$79,558	\$238,675	\$477,350
Pittsylvania County	\$326,840	\$980,521	\$1,961,042
Prince Edward County	\$123,070	\$369,210	\$738,419
<b>Transportation District</b>	<b>\$1,875,000</b>	<b>\$5,625,000</b>	<b>\$11,250,000</b>

Table 2.11: Projected Revenue to Transportation District at 15 Percent Tax Rate

County	Pre-Tax Net Gaming Revenue Only		
	\$50,000,000	\$150,000,000	\$300,000,000
Amherst County	\$254,714	\$764,143	\$1,528,286
Appomattox County	\$127,422	\$382,265	\$764,529
Buckingham County	\$136,736	\$410,209	\$820,417
Campbell County	\$442,191	\$1,326,572	\$2,653,145
Charlotte County	\$96,027	\$288,080	\$576,160
Cumberland County	\$78,901	\$236,704	\$473,409
Halifax County	\$274,454	\$823,361	\$1,646,723
Lynchburg	\$607,852	\$1,823,557	\$3,647,115
Nelson County	\$119,338	\$358,013	\$716,025
Pittsylvania County	\$490,260	\$1,470,781	\$2,941,562
Prince Edward County	\$184,605	\$553,814	\$1,107,629
<b>Transportation District</b>	<b>\$2,812,500</b>	<b>\$8,437,500</b>	<b>\$16,875,000</b>

What other factors may impact the tax revenues?

- The real estate taxes for the casino are based on the minimum required investment of \$200 million in proposed legislation SB 1126.<sup>18</sup> A significant amount of that investment will be equipment and assets that will depreciate over ten years without ongoing maintenance and investment.
- The potential for competition from the expansion of gambling in neighboring states could erode the market for the proposed Danville casino. The expansion of gambling in North Carolina, which currently only has tribal casinos, would significantly erode the core market for Danville. Recently, North Carolina approved sports betting at tribal casinos.
- Another risk is the future addition of new gambling sites in Virginia that compete with the proposed Danville casino. A similar scenario led to the closure of the Monticello Casino after a new facility opened in a neighboring community. Despite the struggles of this and other New York casinos, gaming interests have proposed further expansion of gambling in New York City that will create even more

<sup>18</sup> SB 1126, Chapter 41. Casino Gaming, § 58.1-4100. Conduct of casino gaming; limitation. Section C. Full text is available here: <https://lis.virginia.gov/cgi-bin/legp604.exe?191+ful+CHAP0789>.

competition within the existing New York casino market. See the [Monticello, New York](#) profile on page 65 for more details.

- How much the casino contributes in net new tax revenues versus diverting revenue from existing businesses is a risk that depends on the operations of the new casino and how existing businesses respond to the opportunity.

## Estimating Job Creation

Estimating the new jobs from the proposed casino is highly speculative without a specific development plan and operator. As a result, the job impacts were estimated from the benchmark communities as well as an industry standard input-output model (IMPLAN).<sup>19</sup> Employment numbers for the casinos in the benchmark communities were identified using state gaming reports, news reports, local economic development agencies, and commercial databases. The ranges reported here reflect the seasonal variation in casino employment, and the fact that some sources only report a range and not specific job numbers.

Table 3.1: Casino Employment and Pre-Tax Net Gaming Revenue

<b>Community - Casino</b>	<b>Reported Casino Employment</b>	<b>Pre-Tax Net Gaming Revenue</b>
Charles Town - Hollywood Casino at Charles Town Races	1,000-1,500	\$336M
Dubuque - Diamond Jo Casino	250-500	\$69M
Dubuque - Q Casino	300-500	\$50M
Monticello - Monticello Raceway	150-300	\$30M
Shelbyville - Indiana Grand Racing & Casino	800-1,200	\$276M
St. Joseph - St. Jo Casino	200-300	\$43M

Note: Employment is a total headcount of full-time and part-time jobs.

Estimating the employment using an IMPLAN model for the Danville region for a casino with \$50 million in pre-tax net gaming revenue and \$5 million in related operations (\$55 million in total casino revenue) results in an estimate of 375 jobs in the casino and 200 jobs in the related hotel and restaurant operations, for a total job impact of 575 jobs.

<sup>19</sup> This analysis has used an industry standard IMPLAN model for Danville, Pittsylvania and Caswell counties.

These jobs will be located in Danville, but the jobs will go to both residents and non-residents. See page 37 for more information. An additional 155 jobs could result from indirect effects (the businesses that supply the casino and related operations), plus another 73 jobs from the induced effects (the local spending from all of the workers employed in direct and indirect jobs). The indirect and induced jobs may be located anywhere in the region.

Table 3.2: Job Impacts of a Casino with \$55 Million in Total Revenue

Impact	Casino Jobs	Related Jobs	Total Jobs
1 - Direct	375	200	575
2 - Indirect	119	37	155
3 - Induced	51	22	73

Source: IMPLAN model. Analysis by Fourth Economy.

The IMPLAN model for the Danville region for a casino with \$300 million in pre-tax net gaming revenue and \$15 million in related operations (\$315 million in total casino revenue) results in an estimate of 2,300 jobs working in the casino and 750 jobs in the related hotel and restaurant operations, for a total job impact of 3,050 jobs. These jobs will be located in Danville, but the jobs will go to both residents and non-residents. See page 37 for more. An additional 865 jobs could result from indirect effects (the businesses that supply the casino and related operations), plus another 395 jobs from the induced effects (the local spending from all of the workers employed in direct and indirect jobs). The indirect and induced jobs may be located anywhere in the region.

Table 3.3: Job Impacts of a Casino with \$315 Million in Total Revenue

Impact	Casino Jobs	Related Jobs	Total Jobs
1 - Direct	2,300	750	3,050
2 - Indirect	727	138	865
3 - Induced	312	83	395

Source: IMPLAN model. Analysis by Fourth Economy.

## Job Quality: Earnings and Wages

In addition to the number of jobs created, it is also important to consider how much the workers will earn working in the casino and related operations. Gambling industries pay more than other accommodation and recreation industries, but less than the average for all industries. Earnings in the gambling industry range from \$10 per hour in West Virginia

to nearly \$18 per hour in New York. On average, the hourly earnings in the gambling industry (\$15 per hour) are 57 percent of the average earnings for all industries in the benchmark communities (\$26 per hour). Wages in Danville are lower than in the benchmark communities, but if gambling jobs in Danville also pay 57 percent of the average wage in Danville, then these jobs would pay **\$9.64 to \$11.18 per hour**.

Table 4.1: Hourly Industry Earnings by State, 2018

Hourly Earnings	Other Accommodation & Recreation	Gambling Industries	Average Earnings - All Industries
Indiana	\$9.72	\$15.87	\$24.17
Iowa	\$8.95	\$14.90	\$23.95
Missouri	\$10.77	\$16.12	\$24.40
New York	\$16.18	\$17.97	\$36.32
West Virginia	\$9.28	\$10.03	\$21.93
<b>Average</b>	<b>\$10.90</b>	<b>\$14.92</b>	<b>\$26.16</b>
	Other Accommodation & Recreation - Actual	Gambling Industries - Estimated	Average Earnings - All Industries - Actual
Danville	\$7.97	\$11.18	\$19.61
Pittsylvania	\$8.02	\$10.36	\$18.17
Caswell	\$6.73	\$9.64	\$16.91

Source: Quarterly Workforce Indicators (QWI). State averages are included because industry pay data for some benchmark counties is not disclosed in all cases due to confidentiality requirements. Earnings includes wages, tips, and bonuses but not benefits.<sup>20</sup> *Gambling earnings in Danville are estimated.*

On the positive side, gambling jobs require little training and have higher average earnings for jobs with similar levels of training; as such, gambling jobs can benefit disadvantaged populations and the under-employed.

### What are typical occupations in the gambling industry?

The average hourly earnings obscure the variation in how much people can earn in different jobs within the gambling industry. The national profile of occupations within the gambling industry shows the distribution of jobs and wages that can be expected. The most common gambling industry occupations include gaming service workers, first-line supervisors of gaming workers, food preparation and service, office and administrative

<sup>20</sup> Earnings include gross wages and salaries, bonuses, stock options, tips, and other gratuities, and the value of meals and lodging, where supplied. It does NOT include Old Age Survivor and Disability Insurance, health insurance, workers compensation, unemployment insurance, private pensions, and welfare funds. Earnings may also be affected by the number of hours worked. For more information about earnings data, see [https://lehd.ces.census.gov/doc/Metadata4\\_QWI.htm](https://lehd.ces.census.gov/doc/Metadata4_QWI.htm).

support, cashiers, security guards, and building cleaning workers. Nationally, two-thirds of the jobs in gambling pay average wages of less than \$15 per hour. Service workers and attendants are 29 percent of the industry’s jobs and earn an average of \$14.37. Food preparation workers are 21 percent of the jobs and earn an average of \$12.85. The median wages are lower than the average wage, therefore many workers earn less than \$15 per hour.

Table 4.2: All Gambling Industry Occupations, Sorted by Percent of Total Employment for the United States, 2018

Percent of total employment	Occupation	Hourly Wage (Median)	Hourly Wage (Average)	Annual Wage (Average)
29%	<b>Personal Care and Service Occupations</b> Gaming Services Workers First-Line Supervisors of Gaming Workers Miscellaneous Entertainment Attendants	\$11.51	\$14.37	\$29,890
21%	<b>Food Preparation and Serving Related Occupations</b>	\$11.47	\$12.85	\$26,730
11%	<b>Office and Administrative Support Occupations</b>	\$14.09	\$15.90	\$33,060
10%	<b>Sales and Related Occupations</b> Cashiers	\$11.60	\$13.21	\$27,480
8%	<b>Protective Service Occupations</b> Security Guards and Gaming Surveillance Officers	\$14.29	\$15.71	\$32,680
7%	<b>Building and Grounds Cleaning and Maintenance Occupations</b> Building Cleaning Workers	\$11.94	\$13.24	\$27,540
4%	<b>Installation, Maintenance, and Repair Occupations</b>	\$17.32	\$18.78	\$39,060
3%	<b>Management Occupations</b>	\$38.25	\$45.43	\$94,500
2%	<b>Business and Financial Operations Occupations</b>	\$24.01	\$26.49	\$55,090
2%	<b>Transportation and Material Moving Occupations</b>	\$12.49	\$15.39	\$32,010
2%	<b>All Other Occupations</b>		\$27.01	\$56,172
100%	<b>All Gambling Industry Occupations</b>	\$12.30	\$15.75	\$32,760

Source: Occupational Employment Statistics, Bureau of Labor Statistics - NAICS 713200 - Gambling Industries, [https://www.bls.gov/oes/current/naics4\\_713200.htm](https://www.bls.gov/oes/current/naics4_713200.htm). The wages reported here are similar to the earnings reported in the QWI data.<sup>21</sup>

<sup>21</sup> OES Wages include base rate; cost-of-living allowances; guaranteed pay; hazardous-duty pay; incentive pay, including commissions and production bonuses; and tips. Excluded are overtime pay, severance pay, shift differentials, nonproduction bonuses, employer cost for supplementary benefits, and tuition reimbursements.

Do casino workers make \$46,000 a year?<sup>22</sup>

Nationally, only 7.3 percent of gambling industry workers are in occupations that make an average of \$46,000 or more per year. Across the United States, the average gambling industry worker makes \$32,760 per year, or \$15.75 per hour. Average gambling industry wages in the benchmark communities ranged from a low of \$20,055 per year (\$9.64 per hour) in West Virginia to a high of \$35,944 per year (\$17.28 per hour) in New York.

Table 4.3: U.S. Gambling Industry Occupations, Sorted by Average Annual Wage, 2018

Percent of total employment	Occupation	Hourly Wage (Median)	Hourly Wage (Average)	Annual Wage (Average)
3%	<b>Management Occupations</b>	\$38.25	\$45.43	\$94,500
2%	<b>All Other Occupations</b> Computer and Mathematical Occupations Arts, Design, Entertainment, Sports, and Media Occupations Legal Occupations Miscellaneous Other Occupations		\$27.01	\$56,172
2%	<b>Business and Financial Operations Occupations</b>	\$24.01	\$26.49	\$55,090
	<b>Annual Wage of \$46,000</b>		\$22.12	\$46,000
4%	<b>Installation, Maintenance, and Repair Occupations</b>	\$17.32	\$18.78	\$39,060
11%	<b>Office and Administrative Support Occupations</b>	\$14.09	\$15.90	\$33,060
8%	<b>Protective Service Occupations</b>	\$14.29	\$15.71	\$32,680
2%	<b>Transportation and Material Moving Occupations</b>	\$12.49	\$15.39	\$32,010
29%	<b>Service Occupations</b> Gaming Services Workers First-Line Supervisors of Gaming Workers Miscellaneous Entertainment Attendants	\$11.51	\$14.37	\$29,890
7%	<b>Building and Grounds Cleaning and Maintenance Occupations</b>	\$11.94	\$13.24	\$27,540
10%	<b>Sales and Related Occupations</b> Cashiers	\$11.60	\$13.21	\$27,480
21%	<b>Food Preparation and Serving Related Occupations</b>	\$11.47	\$12.85	\$26,730
100%	<b>All Gambling Industries Occupations</b>	\$12.30	\$15.75	\$32,760

Source: Occupational Employment Statistics, Bureau of Labor Statistics.

<sup>22</sup> "Potential Casino Could Bring Nearly 7,000 Jobs To Danville. The average salary of the jobs would be \$46,000."

<https://www.wfmynews2.com/article/news/local/potential-casino-could-bring-nearly-7000-jobs-to-danville/83-b3597634-9ec2-46ce-a7f9-944095f52876>

How do wages in gambling industries relate to wages in other industries? The wages (or earnings) for the new gambling industry workers in Danville will impact how much benefit these jobs provide to the workers. It will also influence whether workers in different industries might be attracted to work at the casino.

Table 4.4: Hourly Wages/Earnings for Select Industries, 2018

Occupation	Hourly Wage (Average)	Annual Wage (Average)
National Average - Manufacturing	\$25.49	\$53,020
Danville - Living Wage (1 Adult, 1 Child)	\$24.16	\$50,253
Danville - Manufacturing	\$22.52	\$46,844
Annual Wage of \$46,000	\$22.12	\$46,000
<b>Danville - All Industries</b>	<b>\$19.61</b>	<b>\$40,789</b>
\$18/hr Job (2 Year Technical Education)	\$18.00	\$37,440
National Average - Gambling Industry	\$15.75	\$32,760
<b>Benchmark Average - Gambling Industry</b>	<b>\$14.92</b>	<b>\$31,034</b>
\$13/hr Job (Entry Level)	\$13.00	\$27,040
Benchmark Average - Accommodation & Recreation	\$10.90	\$22,672
Danville - Accommodation & Recreation	\$7.97	\$16,578
Danville - Minimum Wage	\$7.25	\$15,080

Source: Quarterly Workforce Indicators.

*If gambling industry workers in Danville make an average of \$46,000 (around \$23 per hour):*

- They would make roughly the same as the average manufacturing worker in Danville.
- They would make more than the average worker in Danville.
- They would not make enough for a living wage<sup>23</sup> for one adult, one child households. In Danville, 60 percent of children live in single parent households.<sup>24</sup>
- In this scenario, gambling industry jobs would be good jobs relative to other employment within Danville. At this wage level, gambling industry jobs may compete for workers who might otherwise take manufacturing jobs.

<sup>23</sup> "Living Wage Calculator for Danville, VA." MIT. <https://livingwage.mit.edu/counties/51590>

<sup>24</sup> Deborah Fallows, "A Regional Approach to Rural Health Challenges," *The Atlantic*, 22 June 2019. <https://www.theatlantic.com/notes/2019/09/lessons-from-danville/598432/>

*If gambling industry workers in Danville make a wage similar to national and benchmark gambling industry wages, they would earn between \$31,000 and \$32,760 (around \$15 per hour):*

- They would make less than the average worker in Danville.
- They would make less than \$18 per hour, a wage comparable for a recent 2-year technical college graduate.
- They would make more than \$13 per hour, a wage comparable for entry level workers.
- In this scenario, gambling industry jobs (many of which are entry-level and require a high school education) would be attractive to entry-level workers in other industries who are earning \$13 per hour.

*Whether gambling industry workers make \$30,000 (\$15 per hr) or \$46,000 (\$23 per hr):*

- In both cases the new gambling industry workers would make more than accommodation and recreation workers. The gambling industry jobs would be attractive to current accommodation and recreation workers within Danville.
- Casino workers will need quality child care options. These workers will need second shift and drop-in child care options given the schedules for these workers. There are currently no licensed drop-in child care facilities in the region, so the casino workforce will have to rely on unlicensed centers, or friends and family.<sup>25</sup>

What are the common requirements for gambling industry workers?

The most common gambling industry jobs, like gaming service workers, food preparation and service, office and administrative support, cashiers, security guards, and building cleaning workers typically require a high school education. Other occupations, like supervisors and high-level casino employees, require postsecondary education. There are currently no specific Virginia regulations or statutes that would impact hiring casino workers, and the Virginia legislature deferred action on drafting regulations for another year. Policies in other states will most likely serve as an example for Virginia. Examples of these policies include:

- Background and/or credit checks
  - Intensive background checks and investigations are required on high level casino employees (owners, operators, CEO, CFO, etc.). These investigations may include a criminal background check and an in-depth financial review.
  - Background checks are also required for staff working in various capacities in the gaming area, such as dealers, slot attendants, cage/cashiers staff,

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<sup>25</sup> River District Consulting, “Drop-In Child Care, Research Report,” September 2019. Prepared for Smart Beginnings Danville Pittsylvania (SBDP).

and anyone that has access to gaming activity or money. Those reviews typically include a general background check, credit check, and potentially drug testing.

- States vary on whether non-gaming staff require background checks. Non-gaming positions include food, beverage, hotel, maintenance, or custodial staff.
- Background checks could limit employment opportunities for formerly incarcerated applicants. Across the United States formerly incarcerated people are unemployed at a rate of more than 27 percent.<sup>26</sup>
- Drug testing
  - Some states and casino operators have drug testing policies in place.
  - Drug testing can limit the pool of applicants. For example, from 2008-2012, nearly 13 percent of full-time employees in the arts, entertainment, and recreation industry were diagnosed with a substance abuse disorder. From the same group, nearly 14 percent used illicit drugs in the past month and 12 percent reported heavy use of alcohol in the past month.<sup>27</sup>
- Age restrictions on casino employment
  - Even though many casino jobs require only a high school degree, some positions are age restricted. Many casinos have a minimum employment age of 18, and an age requirement of 21 for casino floor workers.

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<sup>26</sup> “Out of Prison & Out of Work: Unemployment among formerly incarcerated people.” Prison Policy Initiative. <https://www.prisonpolicy.org/reports/outofwork.html>

<sup>27</sup> “Substance Abuse Testing for Casino Employees.” Confirm Bioscience. <https://www.confirmbiosciences.com/industries/casinos/>

## Where are workers coming from?

Casino workers live both inside and outside of the counties where the casinos are located. Examining commuting data from the five benchmark communities provides an indication of how many future casino employees would be residents of Danville.

Table 4.5: Commuting in Benchmark Casino Communities

County	State	Casino Tract	Percent commuting from <b>within</b> county	Percent commuting from <b>outside</b> of county
Buchanan	MO	Census Tract 3 (Buchanan, MO)	67%	33%
Shelby	IN	Census Tract 7103 (Shelby, IN)	38%	62%
Dubuque	IA	Census Tract 1 (Dubuque, IA)	67%	33%
Sullivan	NY	Census Tract 9517 (Sullivan, NY)	56%	44%
Jefferson	WV	Census Tract 9725.05 (Jefferson, WV)	51%	49%

Source: Longitudinal Employment Household Dynamics

In the benchmark communities, the percentage of employees commuting to a casino census tract from within the county ranges from 38 to 67 percent. The percentage of workers commuting from outside the county ranges from 33 to 62 percent. The home county of the casino will not be the sole recipient of the benefits from casino workers. Many positive benefits, like workers' spending on goods and services, will spread not to the location of the casino, but to the workers' home county.

## Job Quality: Turnover and Seasonality

Another aspect of the quality of jobs is the rate of turnover and seasonality. Turnover refers to the process of hiring new workers to replace those that have left voluntarily or otherwise. Seasonality refers to industries and businesses that may hire temporary workers during periods of high demand that occur on the same seasonal schedule. In some industries, the workers may be laid off during seasonal downturns. From the perspective of the worker, jobs with high turnover and seasonality are less stable and predictable.

What is the rate of turnover in the casino industry?

The rates of turnover (the proportion of workers who are new to the job each quarter) in gambling industries is generally comparable to statewide averages, though West Virginia is the exception. The rate of turnover in gambling industries is generally lower than comparable industries.

Table 5.1: Quarterly Turnover Rates by State and Industry

	All Industries	Gambling Industries	Restaurants and Other Eating Places	Traveler Accommodation	Performing Arts Companies	Other Amusement & Recreation Industries
Indiana	9%	8%	15%	15%	14%	17%
Iowa	8%	9%	16%	13%	13%	17%
Missouri	9%	9%	16%	14%	17%	13%
New York	8%	8%	15%	10%	17%	16%
West Virginia	9%	13%	16%	13%	17%	18%
Grand Total	9%	9%	16%	13%	15%	16%

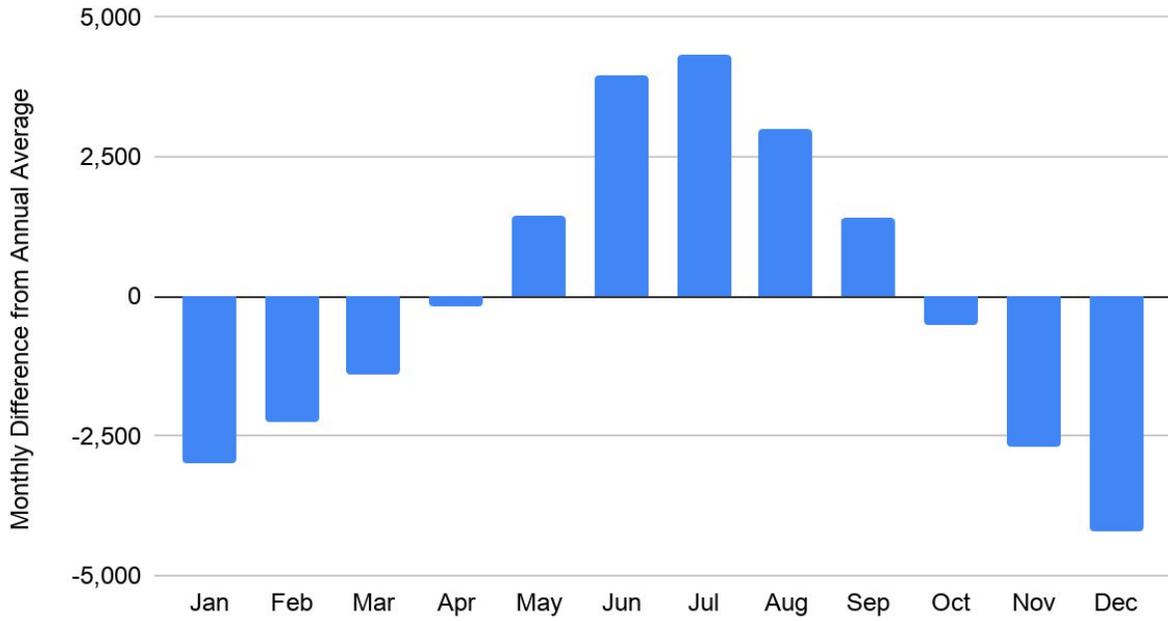
Source: Quarterly Workforce Indicators

How much does casino employment vary during different seasons?

Jobs in casino hotels have a seasonal variation of -2 percent to + 2 percent, compared to -3 percent to +1 percent for all industries in the U.S. This means that while there can be some significant seasonal swings in casino employment it is comparable to the seasonal variation of the overall U.S. economy. The peaks for casino hotels are generally in the higher travel months of spring and summer and coincides with the seasonal cycles for agriculture and tourism.

Figure 5.1: Seasonality in Casino Hotel Employment

### Seasonality in Casino Hotel Employment (U.S. Total)



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

## Development Impacts

Each casino was categorized based on their proximity to the downtown core of the community in terms of driving time in minutes and road distance. Walk Scores range from zero to 100 and provide a measure of the amenities and development within walking distance of a location. From this perspective, the Walk Score indicates whether the casino is isolated and self-contained or whether there are complementary businesses in the vicinity. A higher Walk Score indicates more amenities.

Table 6.1: Development in Casino Communities

<b>Casino Location Opening Date</b>	<b>Driving Minutes to Downtown</b>	<b>Miles to Downtown</b>	<b>Casino Walk Score (0 is low; 100 is high)</b>
Monticello Raceway Monticello, NY 1958 racetrack; 2004-2019 casino	5	1.8	2
Hollywood Casino Charles Town, WV 1993 racetrack; 1996 casino	5	2.1	41
Diamond Jo Dubuque, IA 1994 riverboat; 2008 land-based	5	0.8	48
Q Casino Dubuque, IA 1995	7	2.1	19
St. Jo Casino St. Joseph, MO 1994	8	2.5	12
Indiana Grand Shelbyville, IN 2001 racetrack; 2008 casino	11	5.6	8
Resorts World Catskills Thompson, NY 2018	12	4.2	13

All of the benchmark casino locations have Walk Scores below 50, which indicates that they are more self-contained and not embedded in districts with complementary businesses.

Table 6.2: Casino Area and Community Growth Comparisons

	<b>Community NOT Growing</b>	<b>Community Growing</b>
<b>Casino Area Growing</b>	Charles Town (Hollywood Casino)	Shelbyville (Indiana Grand) Dubuque (Diamond Jo)
<b>Casino Area NOT Growing</b>	Monticello (Monticello Raceway & Resorts World Catskills)	St. Joseph Dubuque (Q Casino)

Table 6.3: Casino Area Growth, Detail

Casino (Reported Casino Employment)	Casino Neighborhood (1.5 Miles)				Community
	2012 Jobs	2017 Jobs	Change 2002-17	Percent Change 2002-17	Percent Change 2002-17
<b>Growth in the casino and the community</b>					
Dubuque - Diamond Jo Casino (250-500)	15,881	17,276	1,395	9%	10%
Shelbyville - Indiana Grand Racing & Casino (800-1,200)	828	2,105	1,277	154%	3%
<b>Growth near the casino, but the community declined</b>					
Charles Town - Hollywood Casino at Charles Town Races (1,000-1,500)	5,891	7,127	1,236	21%	-11%
<b>Decline near the casino and in the community</b>					
Monticello - Monticello Raceway (150-300)	3,561	1,267	-2,294	-64%	-35%
Monticello - Resorts World Catskills (1,000-1,200)	849	399	-450	-53%	-35%
<b>Decline near the casino, but the community grew</b>					
St. Joseph - St. Jo Casino (200-300)	1,486	935	-551	-37%	20%
Dubuque - Q Casino (300-500)	8,641	7,828	-813	-9%	10%

Source: Community employment from the Longitudinal Employment Household Dynamics. Casino employment from state gaming reports, news reports, and top employment lists.

## Do casinos promote related development?

The evidence on whether casinos spur development is mixed. For each benchmark casino community, we compared the number of jobs in 2002 to the jobs in 2017 within a 1.5 mile radius of each casino facility, and then compared that to the change in the number of jobs from 2002-2017 in the community as a whole. The 1.5 mile radius represents essentially the casino neighborhood where the most direct effects would be expected. There are only three cases in which the area around the casino saw an increase in jobs, and in one of those - Charles Town - the community overall lost employment from 2002 to 2017. In Shelbyville, job growth near the casino was primarily the casino itself and the nearby airport, but not other businesses. In Monticello, the areas around both casinos have experienced job loss, and the overall community has declined as well. The area around the St. Jo Frontier Casino shed jobs despite growth in St. Joseph - a pattern repeated near the Q Casino in Dubuque. Dubuque is an interesting case because the area around the Diamond Jo Casino has grown, but it is closer to downtown and less isolated than the Q Casino. It is not possible to provide a direct causal link between the casinos and job growth (or decline) in their vicinity, **but if casinos have a positive spillover effect on other businesses, we would expect to see a more consistent pattern in the job growth near the casinos.**

## Tourism and Visitor Attraction

How many visitors can the Casino be expected to draw?

Given the locations of casinos in other states and the proposed locations in Virginia, the Danville location is expected to draw visitors from within a 100 mile area. Danville has nearly 5.4 million people within 100 miles, which would rank it as the third smallest market among the benchmark regions.

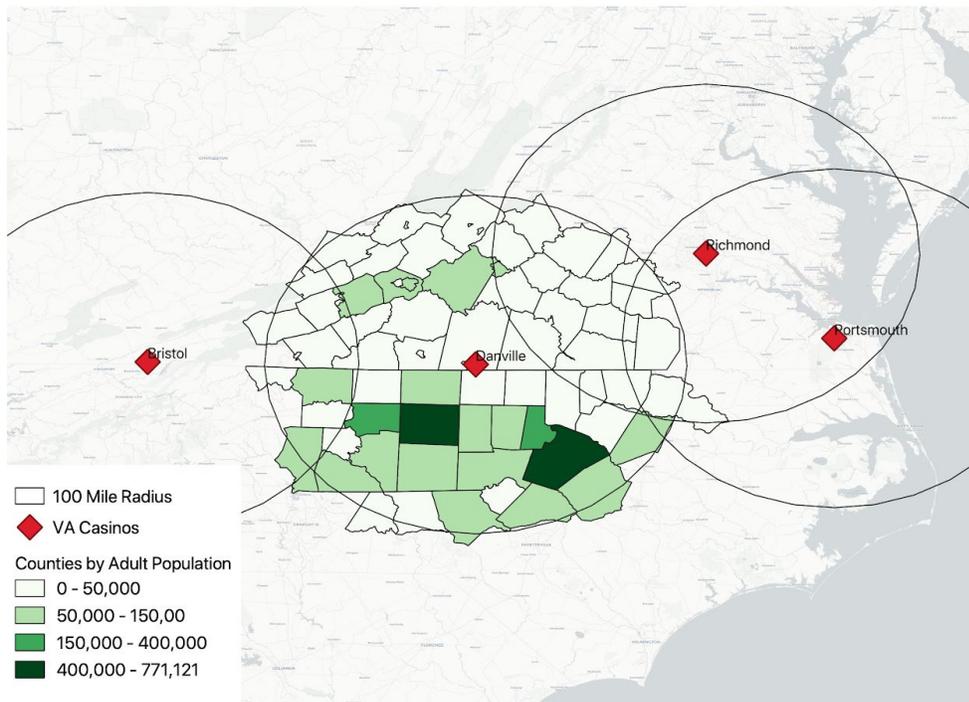
Table 7.1: Gross Gaming Profits and Population within 100 Miles

City	Gross Gaming Profits of the Casino	Population within 100 miles	Gross Gaming Revenue Per Capita (100 miles)
St. Joseph, MO	\$42,955,167	2,949,622	\$15
Dubuque, IA*	\$116,973,477	2,965,374	\$39
<b>Danville, VA</b>		<b>5,398,879</b>	
Shelbyville, IN	\$275,956,046	7,825,560	\$35
Charles Town, WV	\$336,449,000	11,841,556	\$28
Monticello, NY*	\$30,168,105	23,975,385	\$1

Note: Revenues for Dubuque include both casinos. Revenues for Monticello include only the Monticello Raceway and Casino.

Gambling is an age-restricted activity. Virginia has not yet determined whether to set the restriction at 18 or 21 years of age. Assuming that Virginia takes the most liberal position, then there will be approximately 4.4 million adults 18 years or older within 100 miles. However, they are scattered over many small counties and some of those counties are also within 100 miles of other Virginia casinos.

Figure 7.1: Adults within 100 miles of Danville



Source: Population from the American Community Survey. Map by Fourth Economy.

Table 7.2: Estimated Casino Visits Required

Spending per Visit	Total Gaming and Non-Gaming Revenue		
	\$55,000,000	\$160,000,000	\$315,000,000
	Estimated Visits Required		
\$150	366,667	1,066,667	2,100,000
\$300	183,333	533,333	1,050,000

Visitor spending on casino gambling can vary widely by state, especially outside of Nevada. Using a range of gambling estimates based on the benchmark analysis and industry standards, the Danville casino would need a minimum of nearly 183,000 visits to sustain a casino of \$50 million if those visitors spent \$300 per visit. The Danville casino would need 2.1 million visitors, spending \$150 per visit, to sustain \$300 million in pre-tax gaming revenues.

At \$300 per visit, a Danville casino would need to capture only a four percent market share of the 4.4 million adults within 100 miles to sustain a \$50 million casino. In order to sustain a \$300 million annual casino, the casino would have to capture 24 percent of the

adults within 100 miles, and they would have to spend \$300 per visit. If the visitors spend \$150 per visit, then the casino would need to capture 47 percent of the potential market. Gallup reports that 26 percent of Americans visit casinos.<sup>28</sup> Based on this estimate, any market shares of 26 percent or below may be feasible.

Table 7.3: Required Market Shares

Spending per Visit	Total Gaming and Non-Gaming Revenue		
	\$55,000,000	\$160,000,000	\$315,000,000
	Estimated Market Share of Adult Population		
\$150	8%	24%	47%
\$300	4%	12%	24%

Table 7.4: Households with Gambling Earnings

Adjusted Gross Income	US Share of Households with Gambling Earnings	Estimated Households within 100 miles
\$1 under \$10,000	0.5%	1,751
\$10,000 under \$25,000	0.8%	4,372
\$25,000 under \$50,000	1.1%	6,281
\$50,000 under \$75,000	1.7%	5,419
\$75,000 under \$100,000	2.1%	4,259
\$100,000 under \$200,000	2.2%	6,274
\$200,000 or more	2.9%	2,762
<b>All Households</b>	<b>1.08%</b>	<b>31,117</b>

Source: IRS, Statistics of Income Division, Publication 1304, August 2018. Table 1.4.

Most casinos generate revenue from frequent and repeat visitors, so a smaller market share can be offset with more repeat visits. The Internal Revenue Service (IRS) provides data on the various sources of earnings for households.<sup>29</sup> According to their data, which includes all sources of gambling, only one percent of households across all income groups have reporting income from gambling. While the IRS data does not represent all

<sup>28</sup> Setyon, Joe. "Gallup: Nearly Two-Thirds of Americans Admit They Gamble," July 25, 2016, available from: <https://www.cnsnews.com/blog/joe-setyon/gallup-nearly-two-thirds-americans-admit-they-gambled-last-year>

<sup>29</sup> IRS, Statistics of Income Division, Publication 1304, August 2018. Table 1.4. All Returns: Sources of Income, Adjustments, and Tax Items, by Size of Adjusted Gross Income, Tax Year 2016/Filing Year 2017. <https://www.irs.gov/statistics/soi-tax-stats-individual-statistical-tables-by-size-of-adjusted-gross-income>

casino visitors, it does provide some insight into the income ranges of gamblers. The share of households within each income group with earnings from gambling enables some estimate of how gambling might be distributed across households within 100 miles of Danville. Using this data results in a total estimate of more than 31,000 households with gambling earnings (winnings), which would likely represent the core of the repeat market for the proposed casino.

How will demographic and economic conditions impact the ability of the casino to attract visitors?

Older adults generally gamble more than younger generations. After the recession, older adults had a larger decrease in gambling (most likely due to financial strain) while Millennials increased their visitation. This could also be attributed to more Millennials reaching the legal age to gamble, but Millennials still gamble at a lower rate.<sup>30</sup>

Furthermore, younger adults want to spend money on entertainment, food, and recreational amenities casino resorts have to offer. In the “Consumer Behavior in the Gaming Industry” study, The Innovation Group surveyed 1,260 participants of various ages. Boomers and Matures spent approximately 75 percent of their trip budget on gambling. Gen X and Millennials spent only 60 percent of their trip budget on gambling, with spending allocated to shopping and entertainment.<sup>31</sup>

- The recession had a much larger impact on the spending for trips related to gambling. Recent research has indicated that in many cases, casino goers continued to visit the casinos for the entertainment value, but spent less per trip.
- The survey reported that the younger adults not only spent far more on non-gaming amenities than the older adults, but also that the younger adults were most attracted to the casino by the non-gaming amenities.
- The survey also reported that Millennials preferred table games or more skill-based video games compared to the older cohorts. Gaming companies are considering how games and technology to appeal to broader markets.<sup>32</sup> However, the rise of video gaming and various forms of online gaming makes younger adults less reliant on the casino experience.

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<sup>30</sup> The Innovation Group, “Consumer Behavior in the Gaming Industry,” 2014. Available from: <http://theinnovationgroup.com/wp-content/uploads/2016/01/The-Innovation-Group-Consumer-Behavior-in-Gaming-Executive-Summary-Dec-2014.pdf>.

<sup>31</sup> The Innovation Group, “Consumer Behavior in the Gaming Industry.”

<sup>32</sup> “Consumer Behavior in the Gaming Industry”

## How does a Casino fit in a tourism strategy?

A casino development is not likely to generate a tourism market as a stand-alone asset. However, linking casino development to existing tourism infrastructure can have a positive impact on a local economy if it attracts new or more frequent visitors.

Because of market saturation, non-gaming attractions are important in attracting visitors outside of a locale's immediate market. Demographic trends suggest most casino customers will visit the casino that is closest to home unless a non-casino attraction draws them. Considering changing demographics, casinos that are embedded within broader entertainment complexes are finding success. For example, Diamond Jo Casino in Dubuque is part of a larger entertainment complex with a 30-lane bowling alley and dining entertainment.

The West Virginia Tourism Office recognized the importance of attracting visitors outside of its market. The state's response was to seek authority from the legislature, which was passed as the Tourism Act of 2017<sup>33</sup> to grant the Tourism Office responsibility for more than just tourism marketing but tourism industry development. This shift and the development of several new tourism products boosted tourism spending and visitors the following year.<sup>34</sup>

## How are casinos integrated in marketing and promotion efforts?

Not all casinos are featured in local and regional tourism efforts and in some cases even mentions of the casino are notably absent. Shelbyville, Indiana's tourism is headed by Shelby County Tourism and Visitors Bureau (TVB). Shelby County's TVB has a designated page for the Indiana Grand Racing Casino - including the promotion of its premier restaurant, Center Cut. However, on tourism-related websites and brochures promoting St. Joseph, Missouri's tourism assets, the Frontier Casino is not listed as a premier attraction.

## How are casinos integrated in development and land use?

Casino developments thrive and make the most sense where there is a robust hospitality infrastructure. Any economic strategy that supports casinos must commit to investments in restaurant offerings and short-stay accommodations.

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<sup>33</sup> West Virginia Tourism Act of 2017

([https://wvtourism.com/wp-content/uploads/2017/09/tourism\\_act\\_2017.pdf](https://wvtourism.com/wp-content/uploads/2017/09/tourism_act_2017.pdf))

<sup>34</sup> West Virginia Tourism Office. "West Virginia 2018 Annual Report." Available from:

[https://wvtourism.com/wp-content/uploads/2019/02/2018\\_annual\\_report\\_-\\_wv\\_tourism\\_office.pdf](https://wvtourism.com/wp-content/uploads/2019/02/2018_annual_report_-_wv_tourism_office.pdf)

The Port of Dubuque Master Plan identifies the casinos as assets. The plan was adopted in 2002 and has guided development and launched catalytic projects for tourism in the area. Diamond Jo’s transition from a riverboat to a land-based casino did not occur until the latter end of North Port redevelopment (the Grand Harbor Resort and Waterpark was the catalyst and opened in 2002).

Recent plans and [impact studies](#) in St. Joseph, Missouri have suggested the need for a casino hotel along the riverfront. Additionally, the city has researched a possible relocation of the casino to its downtown, anchoring and complementing a proposed downtown entertainment district that includes a renovated convention center and a host of hotel, gaming, and restaurant components. These efforts are currently underway to maximize the city’s downtown assets, increase tourism, and strengthen the competitiveness of its casino.

The Indiana Grand Casino in Shelbyville is a significant focus in the city’s [2019 Comprehensive Plan](#). One of Shelbyville’s objectives is to enhance the Fairland Road/I-74 interchange gateway as a means to increase tourism, with the casino located nearby being a major influence on its future design and development. The city believes development along this gateway will encourage casino visitors to explore the community beyond the casino.

## Social Impacts

Taxes, jobs, and other economic benefits are not the only outcomes associated with local casino development. Counties and regions are often unprepared for the unintended social costs that can accompany casino activity.<sup>35</sup> How the legalization of gambling and proximity of a casino might impact a community and its residents will depend on the unique characteristics, resources, and social infrastructure of that community. Even though these social impacts are harder to quantify, they deserve consideration equal to the economic impacts.

What are the potential impacts on crime?

Casinos create the potential for increases in revenue, but also the potential for increases in costs. Crime is one area of increased cost to government and society. It is difficult to connect the crime rate, or an increase in crime, to an estimated amount in dollars because incremental or marginal increases in crime may not increase expenditures. Furthermore, local expenditures for public safety may vary because of the differing responsibilities of different levels of government. As a result, we have not attempted to place a value on the increases in crime.

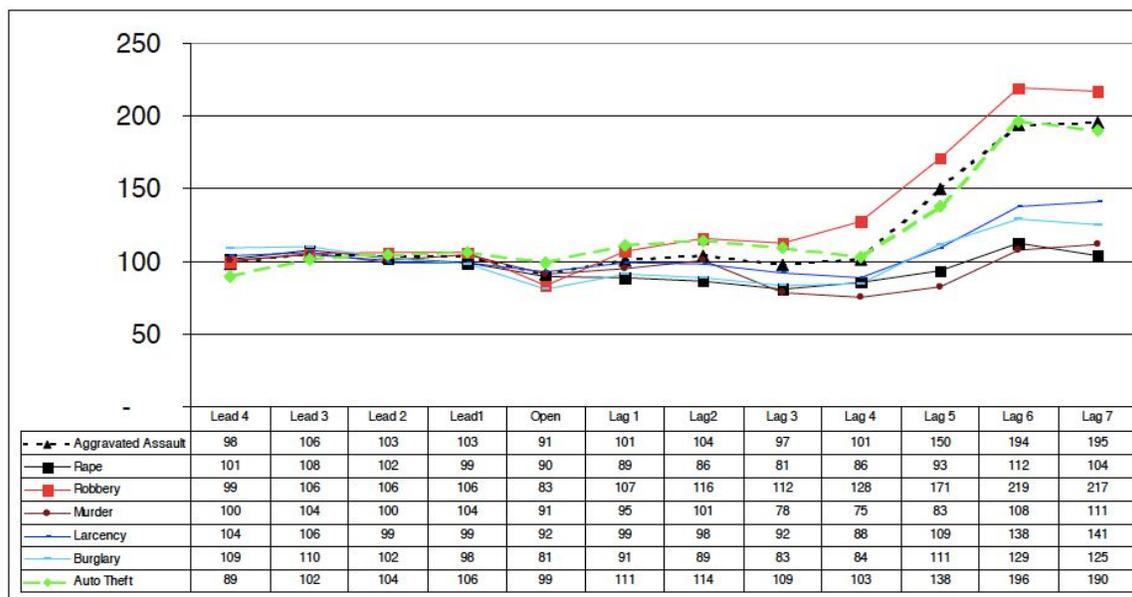
**Crime increases related to casinos are generally the result of increased visitor volume and level of activity.** The most comprehensive (and only) national study that examined the connection between casinos and crime used county-level data between 1977 and 1996 found that **8 percent of crime** observed in casino counties was attributable to casinos. The largest increases were in robbery, auto theft, and aggravated assault in the years after a casino opened.<sup>36</sup> **In the twenty years since this study was published, none of the critics have replicated the scale or time frame of this analysis.**

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<sup>35</sup> Note that some of these impacts, such as crime, may occur with any development that attracts large numbers of visitors.

<sup>36</sup> Grinols, Earl L. and Mustard, David B. and Hunt Dilley, Cynthia J., *Casinos, Crime and Community Costs* (June 2000). Available at SSRN: <https://ssrn.com/abstract=233792> or <http://dx.doi.org/10.2139/ssrn.233792> ; Grinols, Earl and David Mustard. "Casinos, Crime, and Community Costs." The MIT Press. 2006. <https://www.mitpressjournals.org/doi/10.1162/rest.2006.88.1.28>.

Figure 6: Crime Rates Before and After Casino Opening - All Casino Counties Except Florida



Source: Grinols, Mustard and Dilley (2000).

The findings of the Grinols and Mustard study have been used on both sides of the debate about the linkage between casinos and crime in their host communities. Douglas Walker has critiqued the Grinols and Mustard study, arguing that the exclusion of the visiting population from the calculation of the crime rate overstates the crime rate in casino counties. Another critique is that high-crime counties may self-select into the “casino county” category, thereby accounting for the higher crime rates.<sup>37</sup> Grinols and Mustard counter-argued that adjusting the crime rates “depends critically on who the criminals are and who the victims are,” which is hard to determine, but regardless of whether the crime rate is adjusted for visitors or not, **the cost of that crime falls primarily on the jurisdiction where it occurs** and not the jurisdiction of the visitors.<sup>38</sup> Furthermore, the argument that any large visitor attraction will increase crime ignores the unique characteristics of casinos, in that casino visitors may be winning and leaving with large amounts of cash (\$5,000 or more). This is very different than other tourism and visitor attractions.

<sup>37</sup> Walker, Douglas M. “Do Casinos Really Cause Crime?” *Econ Journal Watch*, Volume 5, Number 1, January 2008, pp 4-20. <https://econjwatch.org/articles/do-casinos-really-cause-crime>.

<sup>38</sup> Grinols, Earl and David Mustard. “Correctly Critiquing Casino Crime Causality.” *Econ Journal Watch*, Volume 5, Number 1, January 2008, pp 21-31. <https://econjwatch.org/articles/correctly-critiquing-casino-crime-causality>.

Other critiques of Grinols and Mustard have relied on case studies, or on "meta-analysis" (an analysis of analyses) of case studies in different markets. For example, "Among the 16 studies reviewed, eight studies found no casinos and crime link, six found that casinos unambiguously increased crime and two reported mixed results."<sup>39</sup> Case studies provide valuable research insights, but they cannot be generalized to other communities, even with a meta-analysis. Meta-analysis is controversial because it requires judgment and expertise in selecting the cases and interpreting the results - which creates biases that may influence the conclusions. While the Grinols and Mustard study is now twenty years old, there have not been any studies conducted since that use a cross-sectional national sample over a 20-year time frame. **Case studies, no matter how recent, do not invalidate a rigorous, large-scale study.**

To supplement the literature, we examined the experience of the benchmark communities and compared the crime rates in the host county with the statewide average crime rate to provide a range of estimates of how crime might change with the addition of a casino. These estimates provide both best case and worst case scenarios so that the residents of Danville can determine whether a potential increase in crime is acceptable.

Table 8.1: Property Crimes per 100,000 Population

<i>2009-2017 Average Property Crimes</i>				
County	State	Benchmark County	State	Difference
Buchanan	MO	5,154	1,997	3,157
Shelby	IN	2,291	2,120	171
Dubuque	IA	2,086	1,309	777
Sullivan	NY	1,830	1,776	55
Jefferson	WV	1,494	1,850	(356)
Average		2,571	1,806	765

Source: FBI Uniform Crime Reports.

**These estimates are not predictions and are not intended to presume a causal link between the presence of a casino and increased crime rates.** The factors that determine crime rates are complex. Any activity that brings in large numbers of visitors may result in an increase in crime. The benchmark communities with casinos have higher crime rates compared to their host state, except in the case of West Virginia. On average,

<sup>39</sup> Walker, Douglas M. "Hampton Roads Casino The Likely Socio-Economic Impacts of a New Casino." May 2015. Casinonomics Consulting, LLC, and Chapter 16 of Walker, D.M. (2013). Casinonomics: The Socioeconomic Impacts of the Casino Industry. New York, NY: Springer.

the benchmark communities exhibit an additional 765 property crimes per 100,000 population and an additional 50 violent crimes per 100,000 population.

Table 8.2: Violent Crimes per 100,000 Population

<i>2009-2017 Average Violent Crime</i>				
County	State	Benchmark County	State	Difference
Buchanan	MO	440	270	171
Shelby	IN	353	191	162
Dubuque	IA	208	180	28
Sullivan	NY	253	186	68
Jefferson	WV	135	334	(199)
Average		278	228	50

Source: FBI Uniform Crime Reports.

For violent crime, the benchmark counties have 50 more violent crimes per 100,000 population than the state average. West Virginia is again the exception.

Considering the experience of the benchmark communities, we estimated a range of potential crime impacts ( Table 8.3: Crime Impacts). Danville already has crime rates that are near the top of the benchmark communities (Table 8.4: Comparing Crime Rates for the Dan River Region to the Benchmarks).

Table 8.3: Crime Impacts

	Property	Violent
Low (½ average)	+382	+25
High (average)	+765	+50

Source: FBI Uniform Crime Reports.

Table 8.4: Comparing Crime Rates for the Dan River Region to the Benchmarks

County	State	2009-2017 Average Property Crimes per 100,000 residents	2009-2017 Average Violent Crimes per 100,000 residents
Buchanan	MO	5,154	440
Shelby	IN	2,291	353
Dubuque	IA	2,086	208
Sullivan	NY	1,830	253
Jefferson	WV	1,494	135
Caswell	NC	1,950	229
Pittsylvania	VA	910	87
Danville (City)	VA	4,519	479

Source: FBI Uniform Crime Reports.

Table 8.5: Casino Crimes in Missouri, 2018 and 2019

	2018	2019
Admissions	39,800,000	37,500,000
Casinos	13	13
Arrests	6,032	5,965
Officers	128	128
Admissions per Officer	310,938	292,969
Officers per Casino	10	10
Admissions per Casino	3,061,538	2,884,615
<b>Arrests per 100,000 Admissions</b>	<b>15.2</b>	<b>15.9</b>

Source: Missouri Gaming Commission Annual Report, 2018 and Fiscal Year 2019.

Virginia may consider creating a specialized police force for the casinos to take any burden of crime off of the local community and to provide more consistent policing and tracking of crime at casinos. The state of Missouri maintains a dedicated staff of state patrol officers specifically for casinos. In 2018, Missouri had 39.8 million admissions across 13 casinos. The state hired 128 state patrol officers for casinos. Over the year,

6,032 arrests were made within the 13 casinos.<sup>40</sup> This translates to approximately 15.2 arrests per 100,000 visitors. In 2019, the number of admission and crimes both fell, but the net effect was a slight increase to 15.9 crimes per 100,000 visitors.<sup>41</sup> These arrests include only on-site arrests so they **undercount the total crime impact** that may occur in proximity to the casino. The level of admissions per officer can help to estimate how many officers may be required to support a new casino.

Table 8.6: Casino Arrests in Missouri by Casino, 2019

Casino	Admissions	Revenue	Arrests	Arrests per 100,000 Admissions
Ameristar Casino St. Charles	5,309,663	\$268,723,945	289	5.4
River City Casino	4,947,033	\$220,336,455	817	16.5
Hollywood Maryland Heights	4,910,487	\$233,476,839	251	5.1
Ameristar Casino Kansas City	4,501,841	\$195,111,475	677	15.0
Lumiere Place	4,104,483	\$162,114,182	1,871	45.6
Harrah's North Kansas City	3,450,845	\$177,702,375	366	10.6
Argosy Riverside Casino	3,130,652	\$165,311,931	681	21.8
Isle of Capri -- Kansas City	1,852,460	\$66,449,552	839	45.3
Isle of Capri -- Boonville	1,523,499	\$78,634,697	29	1.9
Isle of Capri -- Cape Girardeau	1,468,850	\$61,845,696	58	3.9
St. Jo Frontier Casino	846,416	\$37,721,954	28	3.3
Lady Luck - Caruthersville	795,679	\$37,366,339	11	1.4
Mark Twain Casino	658,703	\$30,954,443	48	7.3
<b>Total</b>	<b>37,500,611</b>	<b>\$1,735,749,883</b>	<b>5,965</b>	<b>15.9</b>

Source: Missouri Gaming Commission Annual Report, Fiscal Year 2019.

A detailed view of the arrests during 2019 in casinos in Missouri show **a range of possible outcomes for casinos** with different levels of revenue and visitor draw. In general, casinos with higher revenues and more admissions had a greater amount of crime. However, the rate of arrests across the state ranged from 1.9 to 45.6 crimes per 100,000 visitors. In 2019, the number of total arrests at each casino ranged from a low of 11 to a high of 1,871. Missouri patrol officers are responsible for criminal and regulatory

<sup>40</sup> "Missouri Gaming Commission Annual Report, 2018." Available from : [https://www.mgc.dps.mo.gov/annual\\_reports/AR\\_2018.pdf](https://www.mgc.dps.mo.gov/annual_reports/AR_2018.pdf).

<sup>41</sup> "Missouri Gaming Commission Annual Report, 2019." Available from: [https://www.mgc.dps.mo.gov/annual\\_reports/\\_ar\\_main.html](https://www.mgc.dps.mo.gov/annual_reports/_ar_main.html).

enforcement of gaming operations within the state. Officers conduct criminal investigations, make arrests, and process problem gamblers.<sup>42</sup> Assuming that state control makes the policing consistent, then factors beyond the number of admissions are influencing the range of arrest rates.

## Bankruptcies

Research has shown that there are modest increases in bankruptcies in new casino jurisdictions. There is also a direct correlation with the casino life cycle: the longer the casino exists, the greater the increase in bankruptcy over the long-term.

- Research in eight new casino jurisdictions (Alton and Peoria/East Peoria, Illinois; Sioux City, Iowa; St. Joseph, St. Louis City, and St. Louis County, Missouri; and Biloxi, Mississippi) found that casino gambling is associated with an increase in personal bankruptcy in seven of the eight communities. Results indicate a direct relationship between the length of time casinos have operated in a community and the bankruptcy rate. The communities that have had casinos the longest tended to have the greatest increase in bankruptcy.<sup>43</sup>

## Problem Gambling

State and local governments in Virginia will need a source of dedicated funding and will need mental health and addiction counselors specifically trained to treat gambling addiction.

- A 2016 survey by the National Council of Problem Gambling found the amount of dedicated funding by states for problem gambling programs varied greatly, and 10 states did not provide any dedicated funding. Problem gamblers living in states without dedicated funds to address problem gambling are less likely to obtain the help they need to produce good outcomes.<sup>44</sup>
- In response to increasing problem gaming in the state of Iowa, the Iowa Gaming Association established a program that connects Iowans with local agencies who provide gambling prevention, treatment, and recovery support services. Gaming tax funds are earmarked by the state to support the operations of the program. A

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<sup>42</sup> "Gaming Division - History." Missouri State Highway Patrol, 2019.

<https://www.mshp.dps.missouri.gov/MSHPWeb/PatrolDivisions/GD/index.html>

<sup>43</sup> Mark W. Nichols, B. Grant Stitt, David Giacompassi, 2000. "Casino Gambling and Bankruptcy in New U.S. Casino Jurisdictions."

<sup>44</sup> "National Survey of Problem Gambling." National Council on Problem Gambling. 2016.

<https://www.ncpgambling.org/programs-resources/programs/2016-survey-problem-gambling-services/>.

For the definitions of "problem" and "pathological" gambling, see

<https://www.ncrg.org/press-room/media-kit/faq/what-problem-or-pathological-gambling>.

2015 annual report showed 92 percent of those treated by the program reduced signs of problem gambling.

The National Opinion Research Center (NORC) estimated the average social costs per problem and pathological gambler and the rates of problem gambling and pathological gambling.<sup>45</sup> Examples of these social costs include productivity losses, social services, and creditor losses. NORC estimated that 1.5 percent of U.S. adults are lifetime problem gamblers and 1.2 percent of U.S. adults are lifetime pathological gamblers.

Table 8.6: Annual and Lifetime Costs of Problem and Pathological Gamblers

	Share of Adults	Annual Costs (1999\$)	Annual Costs (2019\$)
Problem gamblers	1.5%	\$715	\$1,101
Pathological gamblers	1.2%	\$1,200	\$1,848

Source: NORC 1999. Fourth Economy adjusted the costs for 2019 dollars.

Table 8.7: Annual Costs of Problem and Pathological Gamblers in Danville

Danville	Number	Annual Costs (2019\$)
Adults 18+	32,682	
Additional problem gamblers	490	\$539,792
Additional pathological gamblers	392	\$724,756
<b>Total</b>	<b>882</b>	<b>\$1,264,548</b>

Source: Costs from NORC 1999. Estimates by Fourth Economy.

Table 8.8: Annual Costs of Problem and Pathological Gamblers in Pittsylvania

Pittsylvania		Annual Costs (2019\$)
Adults 18+	49,716	
Additional problem gamblers	746	\$821,134
Additional pathological gamblers	597	\$1,102,502
<b>Total</b>	<b>1,342</b>	<b>\$1,923,636</b>

Source: Costs from NORC 1999. Estimates by Fourth Economy.

<sup>45</sup> "Gambling Impact and Behavior Study." National Opinion Research Center at the University of Chicago. 1999. <http://www.norc.org/PDFs/publications/GIBSFinalReportApril1999.pdf>

The proposed legislation SB 1706 dedicated funding for a Problem Gaming and Treatment Fund, but it is not clear how these dollars will be allocated at the community level.

- Based on the estimated casino revenues and a tax rate of 10 percent the Danville operations will provide \$25,000 to \$150,000 for this fund.
- Based on the estimated casino revenues and a tax rate of 15 percent the Danville operations will provide \$37,500 to \$225,000 for this fund.
- The estimated annual social costs of problem gambling behavior would impact an estimated 2,200 local residents amounting to nearly \$1.3 million for social costs in Danville and \$1.9 million in Pittsylvania, which is far more than the resources going into the state fund annually. Social costs include productivity losses, social services, and creditor losses. Social costs are not paid directly by the municipality, but are spread to employers, social service providers, and individuals.

# **Profiles of the Benchmark Casino Communities**

# Shelbyville, Indiana

Indiana Grand Casino



## Overview

Indiana Grand Casino in Shelbyville, Indiana is one of 13 casinos in the state. The casino brings in \$275,956,046 in pre-tax net gaming revenues. The city of Shelbyville receives \$5,500,519 in gaming revenue and real estate taxes from the casino, with a net effective gaming tax rate of 1.2 percent. Shelby County receives \$8,665,682, a net effective rate of 3.0 percent.

Local casino revenue has been spent on infrastructure and education programs, including incentives for community college, early-learning for pre-kindergarten, and a program to keep juveniles out of the court system.

The casino has recently undergone a change in ownership. Volatile ownership can change the revenue and tax deals. For example, in 2018 Caesars bought Centaur, who was the previous operator, and challenged the license transfer fee for the casino. In 2019, Eldorado bought Caesars and the license challenge is unresolved. Recently, the casino has also faced competition from casinos in suburban Chicago and south of Columbus, Ohio.

## **Local Casino Information**

- Casino Operator: Caesars/Eldorado
- Related Attractions: Indiana Grand Racing
- Local Casino Open Date: 2009
- Use of Local Casino Taxes: Infrastructure and education programs

## **State Casino Information**

- State Commercial Casinos: 13
- State Legalization Date: 1993
- State First Casino Opening Date: 1995
- Use of State Casino Taxes: Economic development, local government
- State Mode of Legalization: Local option vote, legislative action
- State Casino Format: Riverboats, land-based and racetrack casinos with slots and table games

## Effective Tax Rates

<b>Indiana Grand Casino</b>	
Pre-Tax Net Gaming Revenues of the Casino	\$275,956,046
Population within 100 Miles	7,825,560
Pre-Tax Net Gaming Revenue Per Capita (100 Miles)	\$35
<b>Shelbyville, IN</b>	
Total Casino and Real Estate Taxes	\$5,500,519
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	7.5%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	1.2%
<b>Shelby County</b>	
Total Casino and Real Estate Taxes	\$8,665,682
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	8.0%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	3.0%
<b>Indiana</b>	
Total State Casino Tax Revenue	\$603,350,632
<b>State Tax Rate</b> (Total State Casino Tax Revenue / Statewide Pre-Tax Net Gaming Revenue)	26.9%

## St. Joseph, Missouri

St. Jo Frontier Casino



### Overview

St. Jo Frontier Casino in St. Joseph, Missouri is one of 13 casinos in the state. The casino brings in \$42,955,167 in pre-tax net gaming revenues. The city of St. Joseph receives \$1,063,357 in gaming revenue and real estate taxes from the casino, with a net effective gaming tax rate of 2.2 percent. Buchanan County receives \$238,178, a net effective rate of 0.6 percent.

St. Joseph is the county seat of Buchanan County, Missouri. It is the principal city of the St. Joseph Metropolitan Statistical Area, which includes Buchanan, Andrew, and DeKalb counties in Missouri and Doniphan County, Kansas. The population is 76,819, making it the eighth-largest city in the state. St. Joseph is located roughly thirty miles north of Kansas City.

The St. Jo Frontier Casino is a riverboat casino situated on the Missouri River. The casino is located roughly 2.5 miles from the downtown area. The casino is adjacent to Highway 229, which follows Highway 29 to Kansas City. The casino is 45 minutes from Kansas City, 1 hour 55 minutes from Omaha, and 2 hours 40 minutes from Des Moines, Iowa.

St. Jo Frontier Casino is operated by Affinity Gaming. Affinity Gaming operates 11 casinos, five of which are located in Nevada, three in Colorado, two in Missouri, and one in Iowa. The casino employs 237 employees, with a total annual payroll/benefits of \$7,284,498, for an average salary after payroll/benefits of \$30,736 per employee.

St. Jo Frontier Casino is the second-smallest in Missouri and is in its second building and location. In 1998, four years after it initially opened, the current 32,000 square foot casino opened three miles north of the original location. Development costs were \$18 million. There has been limited development adjacent to the casino.

## Local Casino Information

- Casino Operator: Affinity Gaming
- Related Attractions: Casino is located close to attractions in Kansas City
- Local Casino Open Date: 1994
- Use of Local Casino Taxes: Local casino revenue expenditures are determined via the adoption of the annual city budget. Use of local casino taxes includes infrastructure improvements, programming, and economic development activities.

## State Casino Information

- State Commercial Casinos: 13
- State Legalization Date: 1993
- State First Casino Opening Date: 1994
- Use of State Casino Taxes: Education, local public safety programs, compulsive gambling treatment, veterans' programs, early childhood programs
- State Mode of Legalization: Statewide vote, local option vote, legislative action
- State Casino Format: Riverboat

## Effective Tax Rates

<b>St. Jo Frontier Casino</b>	
Pre-Tax Net Gaming Revenues of the Casino	\$42,955,167
Population within 100 Miles	2,949,622
Pre-Tax Net Gaming Revenue Per Capita (100 Miles)	\$15
<b>St. Joseph, MO</b>	
Total Casino and Real Estate Taxes	\$1,063,357
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	0.8%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	2.2%
<b>Buchanan County</b>	
Total Casino and Real Estate Taxes	\$238,178
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	0.7%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	0.6%
<b>Missouri</b>	
Total State Casino Tax Revenue	\$445,721,865
<b>State Tax Rate</b> (Total State Casino Tax Revenue / Statewide Pre-Tax Net Gaming Revenue)	25.7%

## Monticello, New York

Monticello Casino and Raceway



### Overview

Monticello Casino and Raceway in Monticello, New York is one of 12 casinos in the state. Before it closed in 2019, the casino brought in \$30,168,105 in pre-tax net gaming revenues. The village of Monticello was receiving \$741,013 in gaming revenue and real estate taxes from the casino, with a net effective gaming tax rate of 1.0 percent. Sullivan County received \$487,105, a net effective rate of 1.0 percent. Monticello receives no gaming taxes from the new Resorts World Catskills.

The Monticello Casino and Raceway located in the village of Monticello ceased casino operations in April 2019. Empire Resorts, which also owns Resorts World Catskills, wanted to consolidate casino operations at the new facility at Resorts World Catskills. Resorts World Catskills, which is less than 2 miles from the center of Monticello, is not located in the village, but it is located in Sullivan County. Resorts World Catskills has slots, poker and more than 150 live table games. The new facility has been losing more than

\$12 million per month and may face job cuts.<sup>46</sup> Additional competition may arise from new casinos in New York City.<sup>47</sup>

## Local Casino Information

- Casino Operator: Empire Resorts Inc
- Related Attractions: Catskills
- Local Casino Open Date: 2004
- Use of Local Casino Taxes: Defray local hosting costs and property tax reduction

## State Casino Information

- State Commercial Casinos: 12
- State Legalization Date: 2001
- State First Casino Opening Date: 2004
- Use of State Casino Taxes: Education
- State Mode of Legalization: Legislative action
- State Casino Format: Racetrack casinos with publicly run video lottery terminals with distributions to operators

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<sup>46</sup> Axelrod, Daniel. "Empire Resorts could cut staff, salaries if plan to go private isn't approved," *Times-Herald Record*, September 27, 2019. Available from <https://www.recordonline.com/news/20190927/empire-resorts-could-cut-staff-salaries-if-plan-to-go-private-isnt-approved>

<sup>47</sup> Spector, Joseph. "How the pitch for New York City casinos could save the upstate ones," March 18, 2019 <https://www.lohud.com/story/news/politics/albany/2019/03/18/how-pitch-new-york-city-casinos-could-save-upstate-ones/3201551002/>

## Effective Tax Rates

<b>Monticello Raceway and Casino</b>	
Pre-Tax Net Gaming Revenues of the Casino	\$30,168,105
Population within 100 Miles	23,975,385
Pre-Tax Net Gaming Revenue Per Capita (100 Miles)	\$1
<b>Monticello, NY</b>	
Total Casino and Real Estate Taxes	\$741,013
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	5.5%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	1.0%
<b>Sullivan County</b>	
Total Casino and Real Estate taxes	\$487,105
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	0.2%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	1.0%
<b>New York</b>	
Total State Casino Tax Revenue	\$1,022,542,311
<b>State Tax Rate</b> (Total State Casino Tax Revenue / Statewide Pre-Tax Net Gaming Revenue)	43.5%

# Charles Town, West Virginia

Hollywood Casino



## Overview

Hollywood Casino in Charles Town, West Virginia is one of five casinos in the state. The casino brings in \$336,449,000 in pre-tax net gaming revenues. The city of Charles Town receives \$2,744,256 in gaming revenue and real estate taxes from the casino, with a net effective gaming tax rate of 0.3 percent. Jefferson County receives \$4,057,132, a net effective rate of 1.1 percent.

West Virginia legalized casinos in 1994 and table games were approved in 2009. The majority of casinos in West Virginia are racetrack casinos with publicly run video lottery terminals and tables games with distributions to operators. The racetrack at Hollywood Casino opened in 1933, and the casino opened with video machines in 1996 and added table games in 2009.

Hollywood Casino used to be one of the only casinos in the area, and one of the closest casinos to Washington, D.C. However, the casino has recently experienced increased competition. The casino has been losing money since the opening of casinos in Maryland. Between 2017 and 2018, West Virginia's tax revenue from casinos decreased by almost 4%. Hollywood Casino is forecasted to continue losing revenues and is looking

to find other ways to attract visitors, like through events and concerts. The city and county have been forced to adjust to decreased gaming revenue and diversify their revenue streams.

## **Local Casino Information**

- Casino Operator: Penn National
- Related Attractions: Harpers Ferry. Charles Town is also close to Washington, D.C.
- Local Casino Open Date: Video machines in 1996, table games in 2009
- Use of Local Casino Taxes: No information is available

## **State Casino Information**

- State Commercial Casinos: 5
- State Legalization Date: 1994
- State First Casino Opening Date: 1994
- Use of State Casino Taxes: Education, senior citizens, tourism
- State Mode of Legalization: Local option vote, legislative action
- State Casino Format: Racetrack casinos with publicly run video lottery terminals and table games with distributions to operators and one land-based commercial casino

## Effective Tax Rates

<b>Hollywood Casino</b>	
Pre-Tax Net Gaming Revenues of the Casino	\$336,449,000
Population within 100 Miles	11,841,556
Pre-Tax Net Gaming Revenue Per Capita (100 Miles)	\$28
<b>Charles Town, WV</b>	
Total Casino and Real Estate Taxes	\$2,744,256
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	48.0%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	0.3%
<b>Jefferson County</b>	
Total Casino and Real Estate taxes	\$4,057,132
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	17.1%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	1.1%
<b>West Virginia</b>	
Total State Casino Tax Revenue	\$293,005,855
<b>State Tax Rate</b> (Total State Casino Tax Revenue / Statewide Pre-Tax Net Gaming Revenue)	46.9%

## Dubuque, Iowa

Diamond Jo and Q Casinos



### Overview

Diamond Jo and Q Casinos in Dubuque, Iowa are two of 19 casinos in the state. The casinos bring in \$116,973,477 in pre-tax net gaming revenues. The city of Dubuque receives \$2,179,987 in gaming revenue and real estate taxes from the casino, with a net effective gaming tax rate of 0.5 percent. Q Casino is operated by the city and revenues are shared with the city. If adding in the other revenues from Q Casino, the city receives \$9,658,835, for a net effective rate of 6.9 percent. Dubuque County receives \$872,911, a net effective rate of 0.5 percent.

Diamond Jo Casino was established in 1994 as a dockside boat casino. The land facility opened in 2008. Diamond Jo has 444 Employees with 22 tables and 891 slot machines. The casino also features bowling and 1,000-seat live entertainment. Q Casino was established in 1995. Q Casino has 351 Employees with 20 Tables and 823 slot machines.

A master redevelopment plan, adopted in 1998, helped channel investment and development around the casino. The first major development occurred in 2003, based on a master plan adopted in 2002. The Port of Dubuque Master Plan identified the casinos as assets. The plan has guided development and launched catalytic projects for tourism

in the area. Diamond Jo’s expansion to land did not occur until the end of North Port redevelopment (the Grand Harbor Resort and Waterpark was the catalyst and opened in 2002).

## **Local Casino Information**

- Casino Operators: Boyd Gaming and Q Casino
- Related Attractions: Upper Mississippi River National Wildlife and Fish Refuge
- Local Casino Open Date: Diamond Jo opened in 1994; Q Casino opened in 2005
- Use of Local Casino Taxes: Casino Tax revenues in Dubuque go to the general fund.

## **State Casino Information**

- State Commercial Casinos: 19
- State Legalization Date: 1989
- State First Casino Opening Date: 1991
- Use of State Casino Taxes: Infrastructure, schools and universities, the environment, tourism projects, cultural initiatives, general fund
- State Mode of Legalization: Local option vote, legislative action
- State Casino Format: Riverboat, land-based, and racetrack casinos with slots and table games

## Effective Tax Rates

(Taxes Only)

<b>Diamond Jo and Q Casinos</b>	
Pre-Tax Net Gaming Revenues of the Casino	\$116,973,477
Population within 100 Miles	2,965,374
Pre-Tax Net Gaming Revenue Per Capita (100 Miles)	\$39
<b>Dubuque, IA</b>	
<b>(Tax Only)</b>	
Total Casino and Real Estate Taxes	\$2,179,987
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	10.0%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	0.5%
<b>Dubuque County</b>	
Total Casino and Real Estate Taxes	\$872,911
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	1.3%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	0.5%
<b>Iowa</b>	
Total State Casino Tax Revenue	\$336,045,285
<b>State Tax Rate</b> (Total State Casino Tax Revenue / Statewide Pre-Tax Net Gaming Revenue)	23.0%

## Effective Tax Rates

(Taxes and Other Q Casino Revenues)

<b>Diamond Jo and Q Casinos</b>	
Pre-Tax Net Gaming Revenues of the Casino	\$116,973,477
Population within 100 Miles	2,965,374
Pre-Tax Net Gaming Revenue Per Capita (100 Miles)	\$39
<b>Dubuque, IA</b>	
<b>(Taxes and Other Q Casino Revenues)</b>	
Total Casino and Real Estate Taxes	\$9,658,835
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	44.2%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	6.9%
<b>Dubuque County</b>	
Total Casino and Real Estate Taxes	\$872,911
<b>Gaming Share of Total Revenues</b> (Total Casino and Real Estate Taxes / Community Total Revenues)	1.3%
<b>Local Effective Gaming Tax Rate</b> (Tax Revenue from Local Gaming / Pre-Tax Net Gaming Revenues of the Casino)	0.5%
<b>Iowa</b>	
Total State Casino Tax Revenue	\$336,045,285
<b>State Tax Rate</b> (Total State Casino Tax Revenue / Statewide Pre-Tax Net Gaming Revenue)	23.0%

