



CONVERGENCE  
STRATEGY GROUP

# ECONOMIC DEVELOPMENT AUTHORITY OF THE CITY OF RICHMOND, VIRGINIA

---

MARKET ASSESSMENT, FISCAL IMPACTS & JOB CREATION OF A  
RICHMOND RESORT CASINO

---

March 4, 2021

## EXECUTIVE SUMMARY

Convergence Strategy Group (“CSG”) was retained by the Economic Development Authority of the City of Richmond (“EDA”) in February 2021 to provide consulting services related to selection of a site and operator of a private resort casino in the city. This brief provides a summary of one of the initial critical services in this regard – an independent assessment of the gaming market for the potential resort casino, as well as its resulting fiscal impacts and job creation.

The following assessment considers a resort casino in Richmond at three alternative general locations,<sup>1</sup> and is three-fold in importance and use:

- To apprise the City in what we project as the comparative levels of demand, job creation and fiscal impact potential for the alternative sites;
- To use as a reasonableness check against promises made by bidders as to the relative demand and fiscal impact potential for different sites; and
- We recognize that projections have been previously made by third parties for the Commonwealth of Virginia of the market potential for each of the eligible cities for gaming, but the projections were made prior to the determination of the gaming tax rate, which is a major determinant in potential facility scale and magnitude of marketing efforts. As the applicable tax rates are now known, the market potential and fiscal impacts can now be more credibly modeled.

The general locations for study were speculative, based partly on news reports, Richmond 300 discussions, and mutually agreed upon with the EDA and the Department of Economic Development. The locations modeled were: 1) Downtown Richmond; 2) South Richmond; and 3) Northwest Richmond.

*The findings included herein are CSG’s preliminary assessment, and may be amended or revised as additional information and data are provided.*

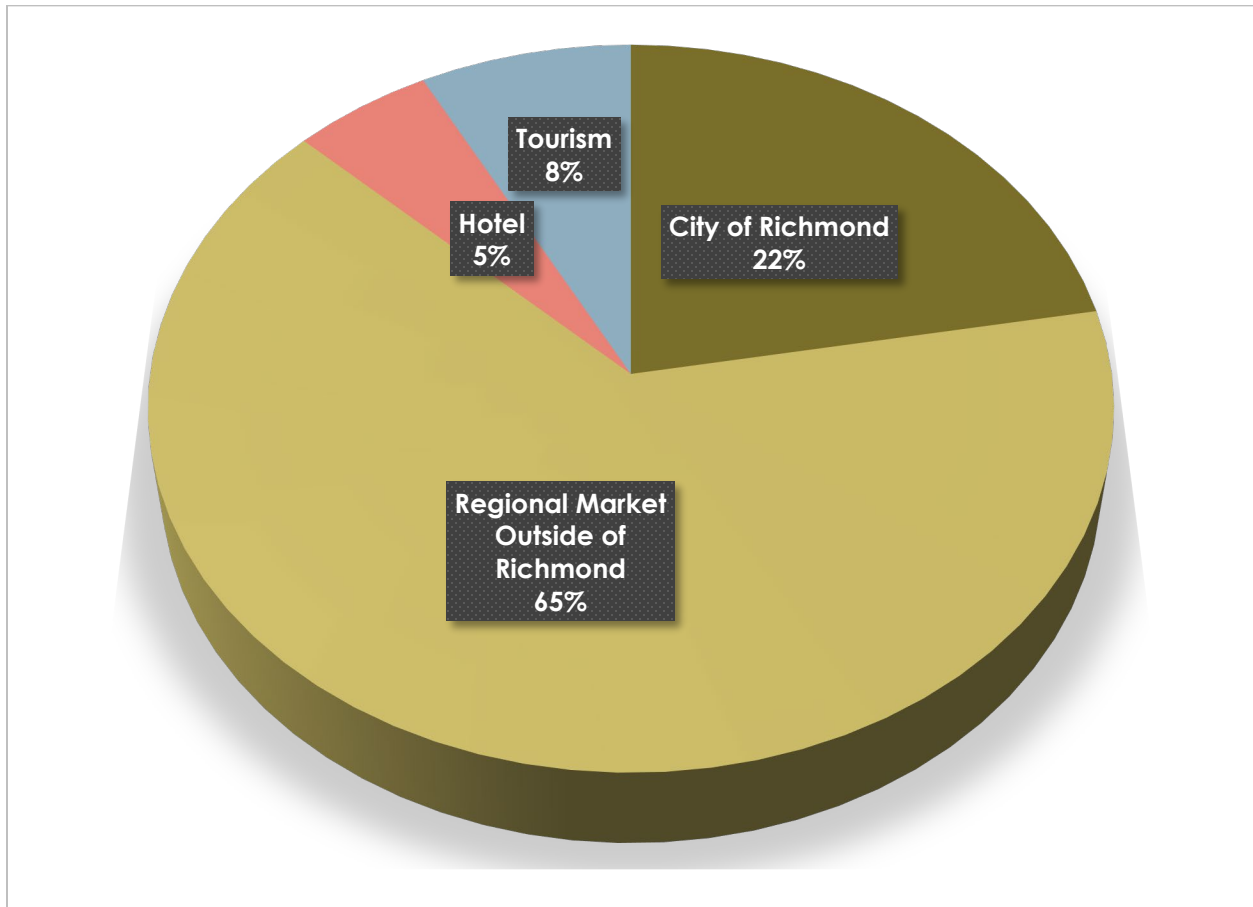
## MARKET ASSESSMENT

In consideration of all of the existing and anticipated competition in the regional market, the Richmond regional market should be capable of supporting a Richmond resort casino with 1,870 to 2,000 slot machines, 80 to 90 table games, and a hotel with 325 to 400 rooms, and should be capable of generating between \$309 million and \$328 million in gross gaming revenues in its first full year of stabilized operations, depending upon the facility location. For each of the alternative locations considered for a casino in Richmond, we project Richmond residents to contribute approximately 22% of the facility gaming revenues, with the remaining generated by those living outside of the city. The mix for a Downtown facility is demonstrated in the following pie chart and table.

---

<sup>1</sup> As of the date of this study, no responses to the City’s RFQ/P for Casino Development and Operation had been received and therefore no specific sites or locations were studied.

### GAMING REVENUE POTENTIAL BY SOURCE, DOWNTOWN RICHMOND SITE



Source: CSG projections

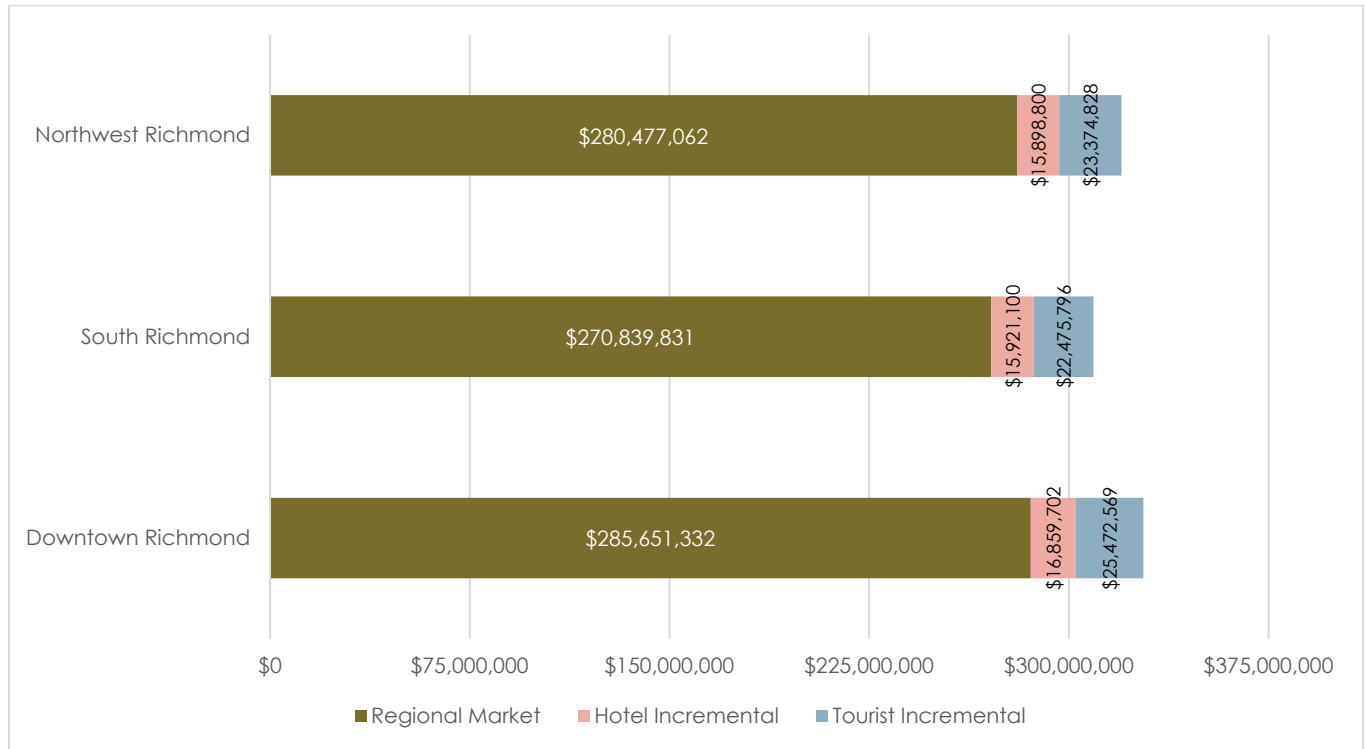
### GAMING REVENUE POTENTIAL BY SOURCE, DOWNTOWN RICHMOND SITE

SOURCE	GGR	SHARE OF GGR
City of Richmond Residents	\$72,696,641	22.2%
Regional Market Outside of Richmond	\$212,954,691	64.9%
Hotel	\$16,859,702	5.1%
Tourism	\$25,472,569	7.8%
TOTAL	\$327,983,603	100.0%

Source: CSG projections

Total gross gaming revenues of \$328.0 million for the Downtown site were projected to be the highest of the locations and scenarios evaluated, with alternative sites expected to generate only slightly less. The lowest projected gross gaming revenues are for the South Richmond site - \$309.2 million, based on all existing and anticipated competition. We note that these totals do not include revenues that may be generated through sports betting, as it is not subject to gaming tax at the local level, and the growth trajectory may be much different than for casino gaming due to the degree of development of an online presence. Bricks and mortar sports betting could be expected to add approximately 3% to GGR.

## GAMING REVENUE POTENTIAL BY LOCATION



Source: CSG projections

We note that the operator of a new (open January 2021), small Historical Horse Racing (“HHR”) gaming facility north of Richmond in Dumfries (approximately 90 minutes from Richmond) has since proposed replacing it with a resort-scale gaming facility, much larger than the existing facility. The projected impact on potential gaming revenues for a Richmond casino are demonstrated in the following table, while noting that the impact would likely be felt to a larger degree at competition to the north of Dumfries, not Richmond.<sup>2</sup>

## SUMMARY OF GAMING REVENUE POTENTIAL

MARKET SEGMENT	DOWNTOWN RICHMOND		SOUTH RICHMOND		NORTHWEST RICHMOND	
	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort
Regional Market	\$285,651,332	\$277,520,388	\$270,839,831	\$262,581,230	\$280,477,062	\$268,982,498
Hotel Incremental	\$16,859,702	\$16,185,516	\$15,921,100	\$15,168,891	\$15,898,800	\$15,089,485
Tourist Incremental	\$25,472,569	\$25,472,569	\$22,475,796	\$22,475,796	\$23,374,828	\$23,374,828
<b>Total GGR</b>	<b>\$327,983,603</b>	<b>\$319,178,473</b>	<b>\$309,236,726</b>	<b>\$300,225,917</b>	<b>\$319,750,690</b>	<b>\$307,446,810</b>

Source: CSG projections

<sup>2</sup> In February 2021 an announcement was made of plans for a 150-device HHR facility in Emporia, on the North Carolina border, which will require a voter referendum. All projections herein assume the HHR facility in Emporia is not developed. As discussed in the regional market assessment, an HHR facility at that location potentially could divert \$2 to \$3 million from a Richmond resort casino. The higher end of that range may apply most to a South Richmond location due to its otherwise greater ability to draw from North Carolina markets, but the difference relative to a Northwest Richmond location would not be substantial.

From a patron demand perspective, we project 2.6 million to 2.8 million casino patrons per year. This helps us to define the optimal scale of the casino, at approximately 2,350 to 2,540 gaming positions,<sup>3</sup> which equates to the aforementioned range of 1,870 to 2,000 slot machines and 80 to 90 table games.

### CASINO PERFORMANCE MEASURES, FIRST STABILIZED YEAR OF OPERATIONS

	DOWNTOWN RICHMOND		SOUTH RICHMOND		NORTHWEST RICHMOND	
	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort
Gaming Revenue (\$M)	\$328.0	\$319.2	\$309.2	\$300.2	\$319.8	\$307.4
Visitation (M)	2.80	2.73	2.63	2.56	2.71	2.61
Win per Visit	\$117	\$117	\$118	\$117	\$118	\$118
Number of Units	2,540	2,490	2,410	2,350	2,490	2,400
Win/Position/Day	\$354	\$351	\$352	\$350	\$352	\$351
Turns/Position/Day	3.0	3.0	3.0	3.0	3.0	3.0

Source: CSG projections. Positions = the number of slots plus 6 positions per table game.

With respect to scale of a hotel, CSG projects an optimal scale of 325 rooms if developed outside of Downtown, with a scale of 400 rooms if developed Downtown to provide additional support to the convention center. Based on prevailing room rates in the Richmond market for upscale properties, an average daily room rate of \$142 was projected, with potential attainment of an occupancy rate in the range of 81% to 86%, generating \$14 million to \$17 million in room revenues (though the casino operator may provide a large share of this complimentary to the patrons).

### POTENTIAL HOTEL PERFORMANCE, FIRST STABILIZED YEAR OF OPERATION

	W/DUMFRIES SMALL HHR			W/DUMFRIES RESORT HHR		
	Downtown	South	Northwest	Downtown	South	Northwest
Rooms	400	325	325	400	325	325
RNA	146,000	118,625	118,625	146,000	118,625	118,625
RND	122,215	102,118	101,108	118,405	97,873	96,919
Occupancy	83.7%	86.1%	85.2%	81.1%	82.5%	81.7%

Source: CSG analysis

Food and beverage (“F&B”) venues would also contribute heavily to patron attraction and spending. CSG projects F&B is projected to generate \$42 million to \$46 million in revenues, a large share of which may be provided as complimentary benefits to gamers. While the gaming and hotel demand is relatively straightforward to forecast based on our modeling for other markets, the food and beverage amenity mix and scale as may be proposed by developers may skew widely, but for an attractive, regional casino, F&B revenues equal to approximately 14% of casino gaming revenues should be a reasonable and attainable assumption.

One of the major differentiating factors that should be expected from casino resort bidders is what is to be offered in the way of additional, revenue-generating ancillary amenities, i.e., entertainment venues, spas, retail, and mixed-use venues. As there are many different concepts that may be

<sup>3</sup> Gaming positions equal the number of slot machines plus the number of seats at a gaming table, or Slots+(Tables x 6) = gaming positions.

proposed, revenue estimates may vary considerable from what is ultimately attainable. In our models we assume a 2,500-seat entertainment venue as the major, ancillary amenity, which should be capable of generating approximately \$10 million per year in ticket sales.

## FISCAL AND EMPLOYMENT IMPACTS

The fiscal impacts as presented in this report primarily address the potential impacts on the City of Richmond. The gaming tax law in Virginia stipulates that the total gaming tax for the first \$200 million in Adjusted Gross Receipts<sup>4</sup> is 18%, for which the host city gets 6% (one-third of the total), a marginal tax rate of 23% on Adjusted Gross Receipts of \$200-\$400 million, of which the host city gets 7%, and a marginal tax rate of 30% for Adjusted Gross Receipts greater than \$400 million, of which the host city gets 8%. As evident from the results of CSG's models, the AGR threshold of \$400 million is not attainable in the first year of stabilized operations. Rather, we project the effective total gaming tax rate will be approximately 20%, and the share going to Richmond equates to an effective 6.3% to 6.4% (but not incremental to the total), for a range of \$19.0 million to \$21.0 million.

### SUMMARY OF GAMING TAX REVENUE POTENTIAL

	DOWNTOWN RICHMOND		SOUTH RICHMOND		NORTHWEST RICHMOND	
	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort
<b>Total Gaming Tax</b>						
First \$200m @ 18%	\$36,000,000	\$36,000,000	\$36,000,000	\$36,000,000	\$36,000,000	\$36,000,000
Incremental @ 23%	\$29,436,229	\$27,411,049	\$25,124,447	\$23,051,961	\$27,542,659	\$24,712,766
<b>Total</b>	<b>\$65,436,229</b>	<b>\$63,411,049</b>	<b>\$61,124,447</b>	<b>\$59,051,961</b>	<b>\$63,542,659</b>	<b>\$60,712,766</b>
<b>Effective</b>	<b>20.0%</b>	<b>19.9%</b>	<b>19.8%</b>	<b>19.7%</b>	<b>19.9%</b>	<b>19.7%</b>
<b>City share</b>						
First \$200m @ 6%	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000
Incremental @ 7%	\$8,958,852	\$8,342,493	\$7,646,571	\$7,015,814	\$8,382,548	\$7,521,277
<b>Total</b>	<b>\$20,958,852</b>	<b>\$20,342,493</b>	<b>\$19,646,571</b>	<b>\$19,015,814</b>	<b>\$20,382,548</b>	<b>\$19,521,277</b>
<b>Effective</b>	<b>6.4%</b>	<b>6.4%</b>	<b>6.4%</b>	<b>6.3%</b>	<b>6.4%</b>	<b>6.3%</b>

Source: CSG projections

We note that there is an existing HHR facility in Richmond (Rosie's Richmond), for which the City gets a share of the gaming taxes. In our models, the decline in tax revenues that may result from a decline in demand at Rosie's is projected to be in the range of \$0.55 million to \$0.79 million.

In addition to gaming taxes, the resort should be expected to generate tax revenues to the City of Richmond through F&B sales (7.5% of revenues), hotel room sales (8% of revenues), entertainment ticket sales (7% of revenues), local sales taxes (1% of F&B, hotel and entertainment ticket sales), property taxes, business licenses and utility taxes. Collectively, the direct fiscal impact of the casino resort is projected to be approximately \$30-\$31 million (potentially \$1 million less if the competitive HHR landscape expands, as discussed as a possibility in this report). This does not include any incremental fiscal agreements between the City and the operator negotiated through the Host Agreement. With respect to the property taxes, we assume a construction cost of approximately \$400

<sup>4</sup> Adjusted Gross Receipts reflects the amount of player buy-in to play, less payouts in prizes (also referred to as Casino Win). Notably, it excludes promotional free play offered by the casino operator and is not inclusive of sports betting.

million, inclusive of approximately \$275 in hard costs for construction and approximately \$60-\$75 million in FF&E.

### ANNUAL TAX POTENTIAL SUMMARY (WITHOUT DUMFRIES RESORT)

	DOWNTOWN	SOUTH	NORTHWEST
Gaming Taxes			
Casino	\$20,958,852	\$19,646,571	\$20,382,548
Net Rosie's decline	-\$752,352	-\$548,787	-\$686,439
Net Gaming	\$20,206,500	\$19,097,784	\$19,696,110
Hotel	\$1,388,362	\$1,160,060	\$1,148,587
F&B	\$3,443,828	\$3,246,986	\$3,357,382
Entertainment	\$716,625	\$716,625	\$716,625
City Sales Tax	\$735,097	\$680,314	\$693,599
Property	\$3,300,000	\$3,300,000	\$3,300,000
Business License	\$165,304	\$155,855	\$161,154
Personal Property (avg/yr first 5 years)	\$1,156,250	\$1,156,250	\$1,156,250
Utilities	\$165,304	\$155,855	\$161,154
Downtown District Special Assessment	\$137,500		
<b>Total</b>	<b>\$31,414,770</b>	<b>\$29,669,730</b>	<b>\$30,390,862</b>

Source: CSG projections

From a jobs perspective, the City of Richmond enjoyed continual job growth from the Great Recession through 2019, ending 2019 with a decade-low unemployment rate of 2.8%. By early in the pandemic the unemployment rate topped 10%, but recovered partially, ending 2020 at 6.5%, reflecting an unemployment level of 7,635, out of a total city labor force of approximately 117,000. Notably, it appears that approximately 3,000 people have dropped out of the labor force during the pandemic, such that the 6.5% unemployment rate is understated. The unemployment level for the city has consistently been approximately 0.5% to 1.5% higher than the rate for the metropolitan area over the past decade. Based on the scale of amenities as we project for the resort, we project a resort casino **full-time equivalent employment range of approximately 1,875 to 2,035**. As a major purveyor of goods and services in the regional economy, indirect job creation should also be expected, though we note that a full economic impact assessment covering indirect benefits was not part of the scope of our engagement.

A significant share of these jobs may go to city residents, especially if negotiated as a target through the host agreement, with nearly all jobs going to residents of the metropolitan area. As noted, while there are currently over 7,600 unemployed persons in Richmond, there are thousands more that are not statistically part of the labor force. As many casino resort jobs require no skill or a modest amount of training, and the facility will be operational 24/7, there will be ample opportunity to lower the unemployment rate in the city and the metropolitan area, but it should not create a strain on the labor market.

## SOCIOECONOMIC IMPACTS

CSG has interviewed public safety officials and city economic development directors in comparable markets throughout the US to gain perspective on how gaming facilities have impacted communities; i.e., whether the gaming facilities created any issues with respect to public safety staffing needs, the volume of calls to the casino, and any information related to memorandums of understanding (MOUs) and/or funding from the casino to the departments and other aspects of city funding. In general, public service needs are minimal for cities as the incremental needs are deemed to be no different than a new, big-box store. Casinos (security operations and executives) typically partner with local public safety officials in order for there to be seamless engagement when there are needs – this is not something that necessarily needs to be negotiated other than having arrangements during special events when some crowd and traffic control assistance may be beneficial.

As the competitive bids for resort casinos come in, it should be expected that there will be plans proposed to engage in different levels of partnerships and financial assistance between the casino operator and the City, and/or various community groups. The structure of such engagements (or lack thereof) will likely vary from bid to bid, and cannot be predicted in form in this assessment. Nevertheless, it should be a significant factor in evaluating potential socioeconomic benefits of specific bids, as well as a tool in negotiations with a preferred bidder.

Negotiations with the preferred bidder through a Host Community Agreement will be key in ensuring that any reasonably anticipated adverse impacts are mitigated, such as traffic impacts, public service needs and efforts to curb problem gambling. The Host Community Agreement should also ensure targets for the hiring of city residents, as well as for the purchases of goods and services from Richmond businesses.

In summary, the casino resort can enrich quality of life for Richmond residents by being a source of entertainment, employment and income, but has the potential to also provide some adverse impacts. Recognition and proactive mitigation of potential adverse impacts can ensure that the casino resort is a clear benefit to the city and its residents, as opined by officials CSG has interviewed in other cities.



## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
MARKET ASSESSMENT.....	1
FISCAL AND EMPLOYMENT IMPACTS .....	5
SOCIOECONOMIC IMPACTS .....	7
<b>INTRODUCTION .....</b>	<b>11</b>
<b>ECONOMIC AND DEMOGRAPHIC ANALYSIS.....</b>	<b>12</b>
TOURISM .....	19
<i>Attractions and Drivers of Visitation.....</i>	19
<i>Hotel Performance .....</i>	20
EMPLOYMENT AND UNEMPLOYMENT.....	20
<b>GAMING MARKET ASSESSMENT .....</b>	<b>23</b>
COMPETITIVE ENVIRONMENT .....	23
<i>Existing gaming facilities .....</i>	25
CASINO GAMING FORECAST .....	29
<i>Regional Market .....</i>	29
<i>Regional Tourism .....</i>	39
<i>Hotel Incremental.....</i>	40
SUMMARY OF RESORT CASINO GAMING POTENTIAL .....	45
<i>Scale and Performance Metrics.....</i>	48
<b>FISCAL AND EMPLOYMENT IMPACT .....</b>	<b>49</b>
TAX IMPACTS .....	49
<i>Casino gaming Taxes.....</i>	49
<i>Hotel Taxes.....</i>	50
<i>F&amp;B Taxes .....</i>	51
<i>Ancillary Amenity Taxes .....</i>	51
<i>Sales Taxes (City Share) .....</i>	51
<i>Property Taxes.....</i>	51
<i>Additional Taxes.....</i>	51
<i>Total Tax Impacts.....</i>	52
LABOR MARKET IMPACTS .....	53
<b>CSG SOCIOECONOMIC RESEARCH .....</b>	<b>55</b>
CINCINNATI, OH.....	56
SPRINGFIELD, MA .....	60
CONTACTS IN OTHER MARKETS .....	61
<b>BENEFITS AND MITIGATION OF IMPACTS .....</b>	<b>62</b>
MITIGATING IMPACTS THROUGH COMMUNITY AGREEMENTS WITH CASINOS.....	62
<i>New Orleans, Louisiana .....</i>	62
<i>Everett, Massachusetts.....</i>	62
<i>Tyre, New York.....</i>	63

Danville, Virginia .....	64
BEST PRACTICES .....	64
POTENTIAL BENEFITS FROM RESORT CASINO DEVELOPMENT .....	65
CASINO GAMER PROFILE AND GAMING BEHAVIOR .....	66
PROBLEM GAMBLING .....	67
Incidence .....	67
Massachusetts Study of Economic and Social Impacts of Gambling .....	67
<b>DISCLAIMER.....</b>	<b>72</b>
<b>GLOSSARY .....</b>	<b>73</b>

### Tables

TABLE 1: KEY DEMOGRAPHIC STATISTICS .....	18
TABLE 2: ENTERTAINMENT SPENDING PER HOUSEHOLD (2020) .....	19
TABLE 3: ADULT OVERNIGHT VISITORS TO RICHMOND (2019) .....	19
TABLE 4: RICHMOND TOP 10 ATTRACTION ATTENDANCE .....	19
TABLE 5: UNEMPLOYMENT RATE, CITY OF RICHMOND, VA .....	20
TABLE 6: UNEMPLOYMENT RATE, RICHMOND MSA .....	21
TABLE 7: NONFARM EMPLOYMENT AND LABOR FORCE DATA, RICHMOND, VA METROPOLITAN STATISTICAL AREA (IN THOUSANDS) .....	22
TABLE 8: COMPETITIVE GAMING FACILITIES IN REGIONAL MARKET .....	25
TABLE 9: MONTHLY VIRGINIA HHR PERFORMANCE SINCE INCEPTION .....	27
TABLE 10: RICHMOND MARKET AREA, GAMBLER IN A CASINO IN LAST 12 MONTHS (INDEX) .....	30
TABLE 11: RICHMOND MARKET AREA GAMING AGE (21+) POPULATION .....	33
TABLE 12: RICHMOND MARKET AREA AVERAGE HOUSEHOLD INCOMES .....	34
TABLE 13: POTENTIAL REGIONAL MARKET GAMING PATRONAGE AND REVENUES, DOWNTOWN RICHMOND SITE.....	35
TABLE 14: POTENTIAL REGIONAL MARKET GAMING PATRONAGE AND REVENUES, SOUTH RICHMOND SITE.....	37
TABLE 15: POTENTIAL REGIONAL MARKET GAMING PATRONAGE AND REVENUES, NORTHWEST RICHMOND SITE.....	38
TABLE 16: POTENTIAL TOURISM INCREMENTAL BY LOCATION.....	40
TABLE 17: POTENTIAL HOTEL GUEST INCREMENTAL, DOWNTOWN RICHMOND SITE .....	41
TABLE 18: POTENTIAL HOTEL GUEST INCREMENTAL, SOUTH RICHMOND SITE .....	42
TABLE 19: POTENTIAL HOTEL GUEST INCREMENTAL, NORTHWEST RICHMOND SITE.....	44
TABLE 20: POTENTIAL HOTEL PERFORMANCE, FIRST STABILIZED YEAR OF OPERATION .....	45
TABLE 21: SUMMARY OF GROSS GAMING REVENUE POTENTIAL .....	46
TABLE 22: GROSS GAMING REVENUE POTENTIAL BY SOURCE, DOWNTOWN RICHMOND SITE.....	47
TABLE 23: CASINO PERFORMANCE MEASURES, FIRST STABILIZED YEAR OF OPERATIONS.....	48
TABLE 24: SUMMARY OF GAMING TAX REVENUE POTENTIAL .....	49
TABLE 25: POTENTIAL ANNUAL HOTEL ROOM TAX.....	50
TABLE 26: POTENTIAL ANNUAL F&B TAX.....	51
TABLE 27: ANNUAL TAX POTENTIAL SUMMARY (WITHOUT DUMFRIES RESORT) .....	53
TABLE 28: COMPARABLE CITIES WITH NEW CASINO DEVELOPMENT .....	56
TABLE 29: EXCERPT FROM 2020 OHIO CASINO CONTROL COMMISSION ANNUAL REPORT - CRIMINAL STATISTICS.....	58
TABLE 30: EXCERPT FROM 2019 OHIO CASINO CONTROL COMMISSION ANNUAL REPORT - CRIMINAL STATISTICS.....	59

### Maps

MAP 1: RICHMOND AREA AND DRIVE TIMES FROM DOWNTOWN .....	13
MAP 2: RICHMOND AREA TOTAL POPULATION (2020) .....	15
MAP 3: RICHMOND AREA AVERAGE HOUSEHOLD INCOMES (2020) .....	16
MAP 4: RICHMOND AREA CASINO INDICES .....	17
MAP 5: RICHMOND AREA GAMING FACILITIES .....	24
MAP 6: RICHMOND GAMING MARKET AREAS .....	32

### Charts

CHART 1: GROSS GAMING REVENUE POTENTIAL BY LOCATION (WITH DUMFRIES SMALL HHR) .....	46
CHART 2: GROSS GAMING REVENUE POTENTIAL BY SOURCE, DOWNTOWN RICHMOND SITE .....	47

## INTRODUCTION

Convergence Strategy Group was retained by the Economic Development Authority of the City of Richmond (“EDA”) in February 2021 to provide consulting services related to selection of a site and operator of a private resort casino in the city. This brief provides a summary of one of the initial critical services in this regard – an independent assessment of the gaming market for the potential resort casino, as well as its resulting fiscal impacts and job creation.

The following assessment considers a resort casino in Richmond at three alternative general locations,<sup>5</sup> and is three-fold in importance and use:

- To apprise the City in what we project as the comparative levels of demand, job creation and fiscal impact potential for the alternative sites;
- To use as a reasonableness check against promises made by bidders as to the relative demand and fiscal impact potential for different sites; and
- We recognize that projections have been previously made by third parties for the Commonwealth of Virginia of the market potential for each of the eligible cities for gaming, but the projections were made prior to the determination of the gaming tax rate, which is a major determinant in potential facility scale and magnitude of marketing efforts. As the applicable tax rates are now known, the market potential and fiscal impacts can now be more credibly modeled.

The general locations for study were speculative, based partly on news reports, Richmond 300 discussions, and mutually agreed upon with the EDA and the Department of Economic Development. The locations modeled were: 1) Downtown Richmond; 2) South Richmond; and 3) Northwest Richmond.

*The findings included herein are CSG’s preliminary assessment, and may be amended or revised as additional information and data are provided.*

---

<sup>5</sup> As of the date of this study, no responses to the City’s RFQ/P for Casino Development and Operation had been received and therefore no specific sites or locations were assessed.

## ECONOMIC AND DEMOGRAPHIC ANALYSIS

In evaluating any market, it is critical to understand the demographic and economic profile of its residents and visitors. The following section details and assesses the size of the population, income levels, and employment in the region surrounding and including Richmond, Virginia. Various reports and statistics prepared by federal, state and local agencies were reviewed, including the U.S. Census, Bureau of Labor Statistics, and Richmond Region Tourism. Additionally, data was derived from sources such as Convergence Strategy Group's in-house geographic information systems (GIS) provider, ESRI. ESRI is the worldwide leader in geographic information systems and data aggregation, utilizing data from the U.S. Census, local, state and federal government agencies, and its own proprietary research.<sup>6</sup>

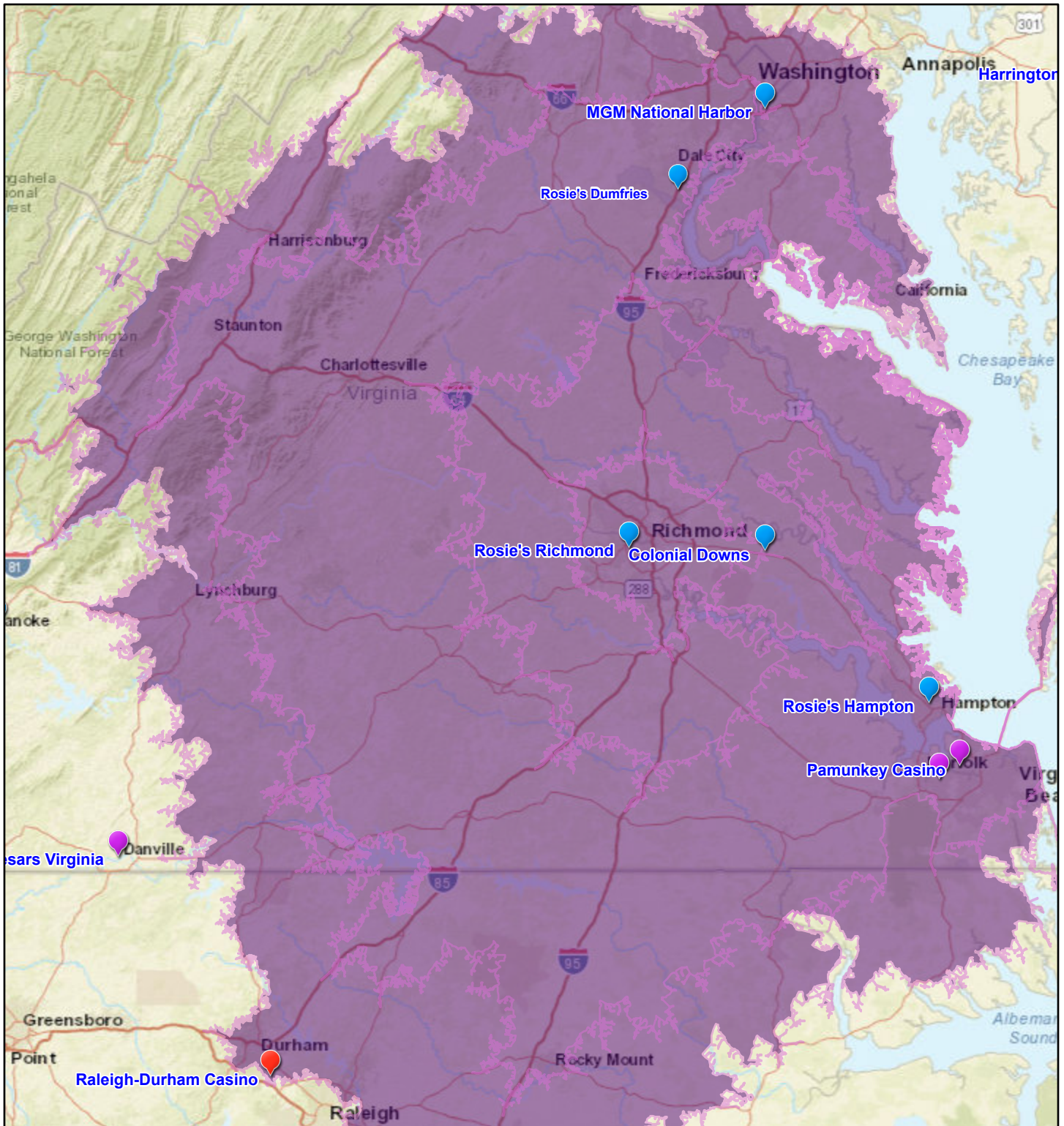
Typical urban-based casinos in the United States draw primarily from the population within an approximate 2-hour drive time, as well as from an existing tourism base. Rural casinos more commonly market to, and draw from, a somewhat wider region, extending 3 hours or more, as may be necessary in order to target areas with sufficient population density to support operations. *Map 1* illustrates the regional geography surrounding Downtown Richmond in terms of drive-time rings, as calculated from a centroid location of the Richmond EDA office at 1500 East Main Street.

---

<sup>6</sup> ESRI's full Methodology Statement:  
[http://downloads.esri.com/esri\\_content\\_doc/dbl/us/J10268\\_Methodology\\_Statement\\_2020-2025\\_Esri\\_US\\_Demographic\\_Updates.pdf](http://downloads.esri.com/esri_content_doc/dbl/us/J10268_Methodology_Statement_2020-2025_Esri_US_Demographic_Updates.pdf)

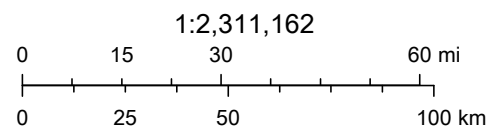


MAP 1: RICHMOND AREA AND DRIVE TIMES FROM DOWNTOWN



March 3, 2021

- Existing and Potential Gaming
- Existing
  - Potential
  - Pending
- |  |
|--|
| <span style="border: 1px solid black; width: 30px; height: 15px; display: inline-block;"></span> 30.0 Minutes    |
| <span style="border: 1px solid black; width: 30px; height: 15px; display: inline-block;"></span> 60.0 Minutes    |
| <span style="border: 1px solid black; width: 30px; height: 15px; display: inline-block;"></span> 120.0 Minutes   |
| <span style="background-color: #800080; width: 30px; height: 15px; display: inline-block;"></span> 150.0 Minutes |



Esri, HERE, Garmin, NGA, USGS, NPS

As detailed in *Table 1* and illustrated in *Map 2*, the City of Richmond has a total population of 230,163, nearly 1.1 million people living within a 30-minute drive time of Downtown Richmond, and over 6.4 million people within a 2-hour drive. Those of legal gaming age (21+) number 171,819 in Richmond, 793,174 within 30 minutes, and nearly 4.8 million within 2 hours.

The income levels in the 2-hour region surrounding Richmond exceed national levels in terms of median household income, average household income, and per capita income, but for the City itself fall below the national median, average and per capita, as could be expected given Richmond's status as a 'disadvantaged city', allowing it to be eligible to pursue a gaming license.

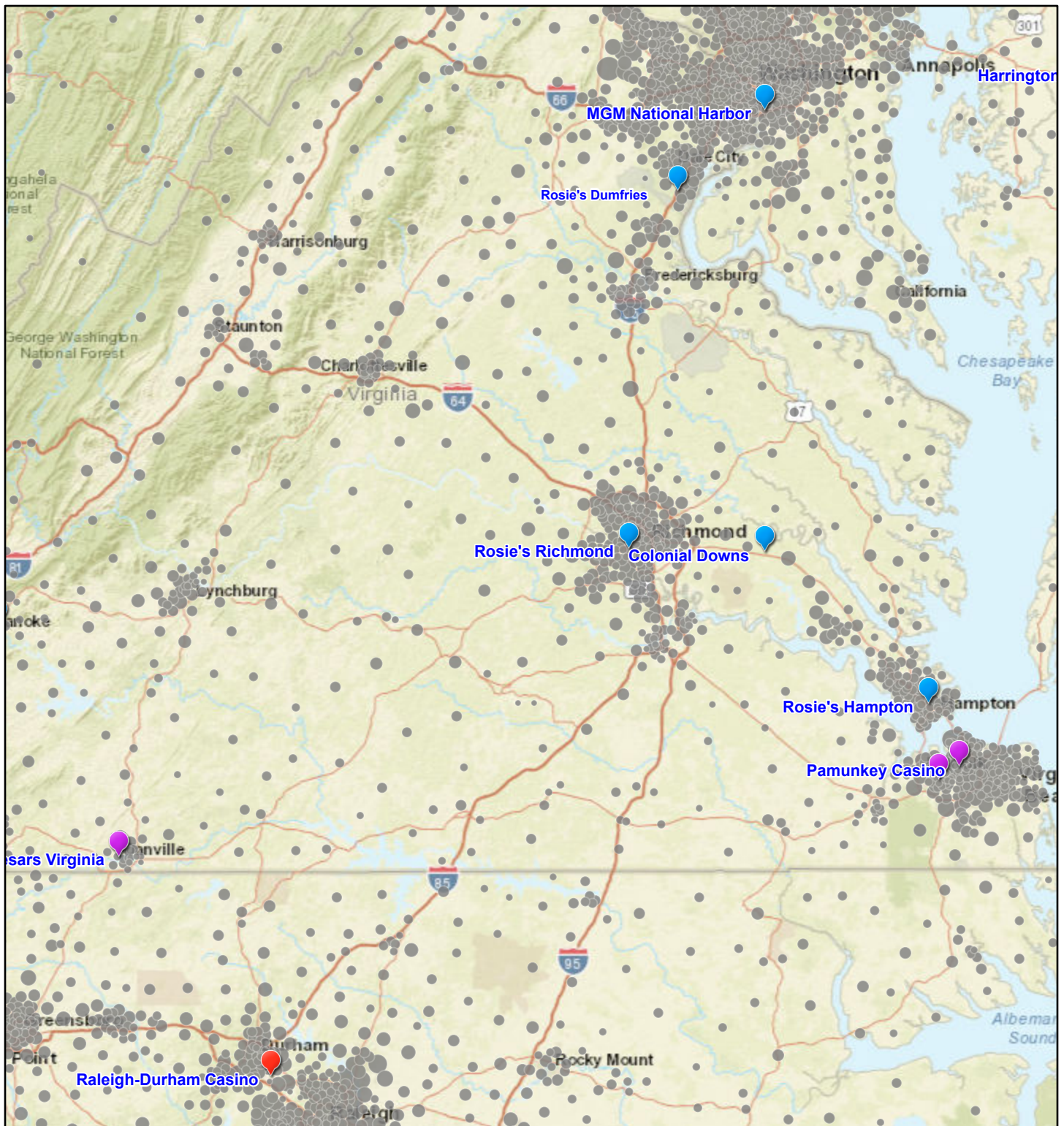
*Map 4* displays the casino gaming indices for the region surrounding Richmond. The data underlying the map is derived from ESRI research into consumer behaviors across the United States, and is specific to the question of whether an adult has gambled in a casino in the last 12 months.<sup>7</sup> For the index, a score of 100 is the national average, while one below it represents below-average behavior, and one above 100 reflects above-average behavior. Such indices can be one indicator of the potential success of casino operations in a market.

---

<sup>7</sup> These data for 2020 are derived from the June 2020 data release and reflect the period 12 months prior.



MAP 2: RICHMOND AREA TOTAL POPULATION BY CENSUS TRACT, DOT DENSITY (2020)



March 3, 2021

Existing and Potential Gaming

Existing

Potential

Pending

10

100

1,000

100,000

ACS Population Variables - Centroids - Tract

1

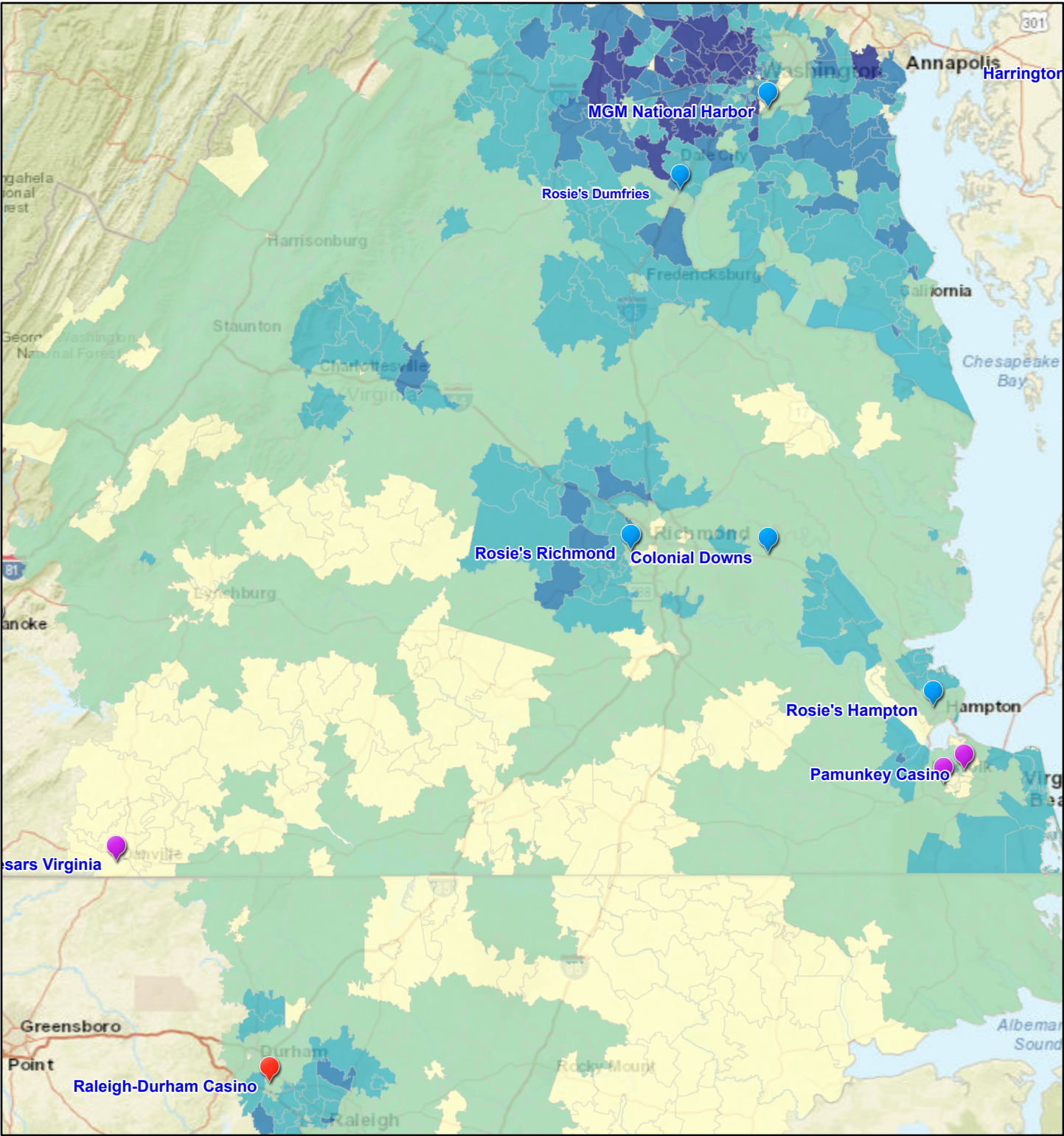
1:2,311,162

0 15 30 60 mi  
0 25 50 100 km

Esri, HERE, Garmin, NGA, USGS, NPS

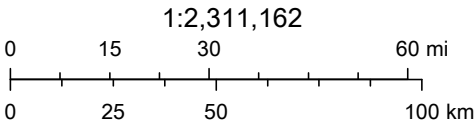
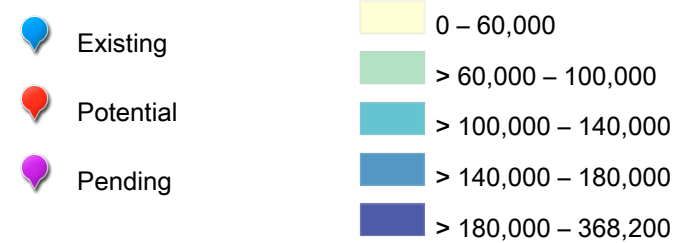


MAP 3: RICHMOND AREA AVERAGE HOUSEHOLD INCOMES (2020)



March 3, 2021

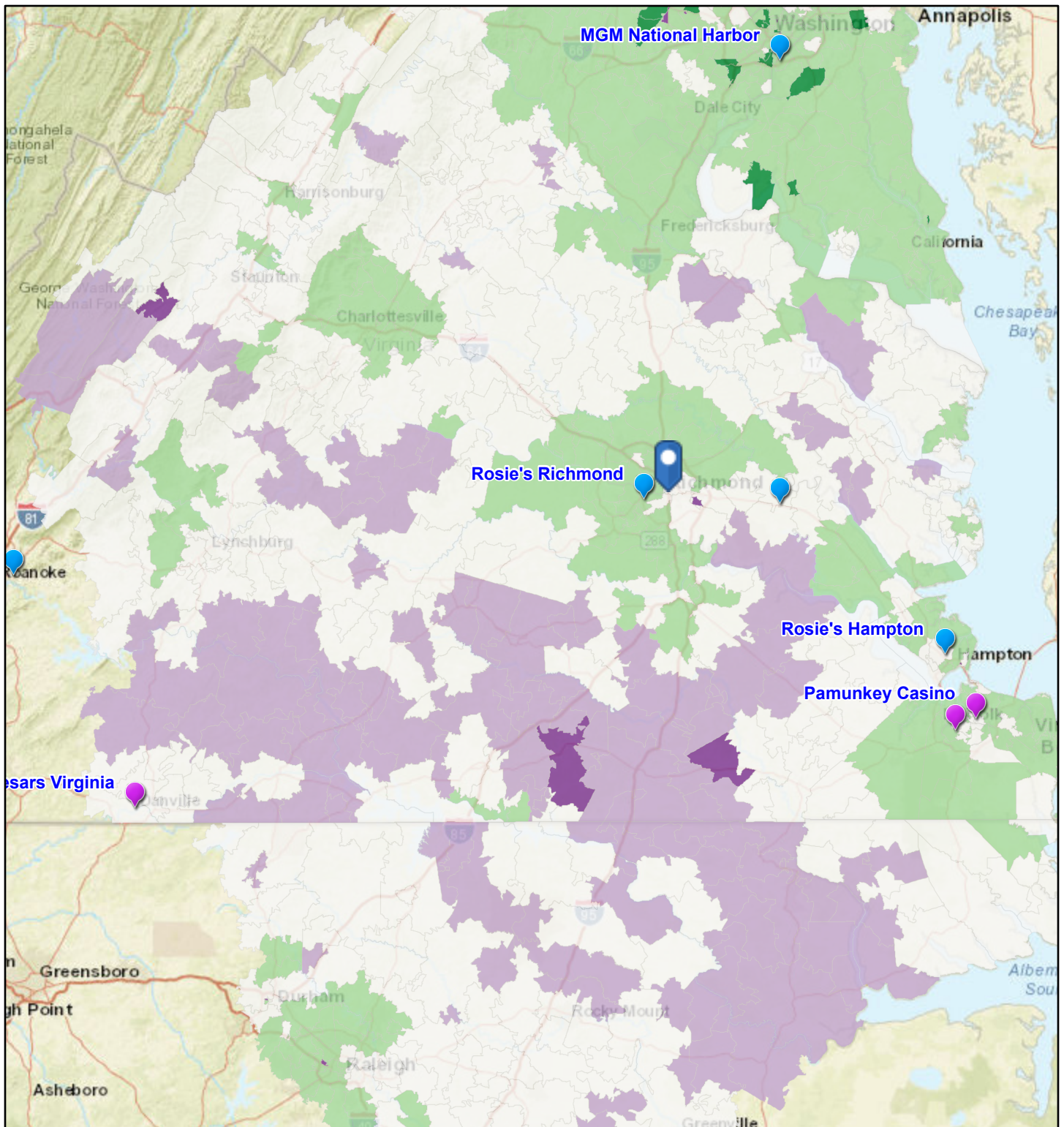
Existing and Potential Gaming Market Area Data.AvgHHInc 2020



Esri, HERE, Garmin, NGA, USGS, NPS



**MAP 4: RICHMOND AREA CASINO INDICES (Gambled at Casino Last 12 Months, June 2020)**



February 10, 2021

Existing and Potential Gaming



Existing



Pending

> 50 – 75

> 75 – 100

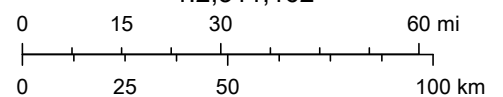
> 100 – 125

> 125 – 183

Market Area Data.Casino Index 2020

0 – 50

1:2,311,162



Esri, HERE, Garmin, NGA, USGS, NPS

**TABLE 1: KEY DEMOGRAPHIC STATISTICS**

	RICHMOND DOWNTOWN (30 MINUTES)	RICHMOND DOWNTOWN (60 MINUTES)	RICHMOND DOWNTOWN (120 MINUTES)	RICHMOND CITY, VA	VIRGINIA	USA
<b>Total Population</b>						
2020	1,066,437	1,590,967	6,430,305	230,163	8,684,166	333,793,107
2025	1,117,811	1,674,226	6,668,977	242,282	9,008,218	346,021,282
CAGR	1.0%	1.0%	0.7%	1.0%	0.7%	0.7%
<b>Total Population Age 21+</b>						
2020	793,174	1,188,464	4,779,877	171,819	6,459,367	246,683,741
2025	838,127	1,259,480	4,994,304	181,144	6,742,224	257,134,340
CAGR	1.1%	1.2%	0.9%	1.1%	0.9%	0.8%
<b>Median Age</b>						
2020	38.6	39.5	38.3	34	38.9	38.5
2025	39.4	40.3	39.2	34.7	39.7	39.3
<b>Median Household Income</b>						
2020	\$67,574	\$68,662	\$75,582	\$49,548	\$73,543	\$62,203
2025	\$72,489	\$73,670	\$79,794	\$52,176	\$78,237	\$67,325
CAGR	1.4%	1.4%	1.1%	1.0%	1.2%	1.6%
<b>Average Household Income</b>						
2020	\$93,909	\$93,811	\$103,342	\$77,299	\$104,769	\$90,054
2025	\$102,398	\$102,341	\$112,832	\$85,034	\$114,508	\$99,510
CAGR	1.7%	1.8%	1.8%	1.9%	1.8%	2.0%
<b>Per Capita Income</b>						
2020	\$37,097	\$36,299	\$39,238	\$33,232	\$40,095	\$34,136
2025	\$40,412	\$39,553	\$42,795	\$36,542	\$43,727	\$37,691
CAGR	1.7%	1.7%	1.8%	1.9%	1.7%	2.0%
<b>Aggregate Household Income</b>						
2020	\$39,429,478,251	\$57,447,187,876	\$250,836,799,333	\$7,598,667,636	\$346,407,308,548	\$11,354,233,213,345
2025	\$45,043,063,811	\$65,916,848,078	\$283,933,630,748	\$8,803,483,854	\$392,114,933,386	\$13,001,711,477,846
CAGR	2.7%	2.8%	2.5%	3.0%	2.5%	2.7%
<b>Aggregate Disposable Income</b>						
2020	\$29,502,109,213	\$43,115,334,429	\$184,285,350,460	\$5,679,788,727	\$252,477,298,816	\$8,574,636,928,271
<b>Entertainment/Recreation Spending</b>						
2020	\$1,405,867,603	\$2,064,384,937	\$9,004,763,307	\$269,895,351	\$12,561,185,662	\$409,653,990,432
<b>Gambled at casino in last 12 months (metric where 100=normative, the US average)</b>						
2020	104	102	104	103	102	100

Source: ESRI. Note: ESRI surveys do not project future spending or activity participation. CAGR: Compound Annual Growth Rate.

Of note when assessing potential resort casino markets are the behaviors and spending patterns of the regional population. In our analysis for the City of Richmond, we have additionally considered the disposable income, entertainment spending, and prevalence of casino gaming behavior of the population. Richmond households spend on average \$3,020 per year on entertainment and recreation, a figure somewhat lower than that for the 30-minute region (\$3,650), and significantly less than the 2-hour region (\$4,048). By comparison, the average for Virginia households is \$4,147 and the national average is \$3,590. These figures are shown in *Table 2* below.

**TABLE 2: ENTERTAINMENT SPENDING PER HOUSEHOLD (2020)**

GEOGRAPHY	ENTERTAINMENT SPENDING/HOUSEHOLD
Richmond City, VA	\$3,020
Richmond Downtown (30 minutes)	\$3,651
Richmond Downtown (60 minutes)	\$3,677
Richmond Downtown (120 minutes)	\$4,048
Virginia	\$4,148
USA	\$3,590

Note: ESRI spending estimates for 2020 are from the June 2020 data release and reflect the 12 months prior.  
 Source: ESRI

## TOURISM

According to the FY 2019-2020 Annual Report of The Impact of Tourism for Richmond Region Tourism, the area hosted 7.7 million visitors who spent \$2.9 billion (or an average of \$377 each) in 2019. The visitors to the city of Richmond spent an estimated \$836.45 million in 2019. More detailed data was provided to CSG by Richmond Region Tourism which indicates that the city hosts 3.75 million adult overnight visitors who stay on average 2.1 nights.

**TABLE 3: ADULT OVERNIGHT VISITORS TO RICHMOND (2019)**

	ALL TRIPS	OVERNIGHTS
Total Est. US Adult Trips (July to December 2019)	3,704,497	1,872,983
Annualized	7,408,994	3,745,966
Average Nights (July to December 2019)		2.1

Source: Richmond 2019 and 2020, Arrivallist study; CSG estimates

## ATTRACTIONS AND DRIVERS OF VISITATION

For the period of July 2019 through June 2020, the top attractions in in the Richmond area included James River Park, Virginia Capital Trail, and Maymont – each hosting over 900 thousand visitors in the year.

**TABLE 4: RICHMOND TOP 10 ATTRACTION ATTENDANCE**

ATTRACTION	ATTENDANCE (2019)
James River Park	1,992,028
Virginia Capital Trail	1,074,799
Maymont	935,543
Henricus Historical Park	576,463
Science Museum of Virginia	393,597
Virginia Museum of Fine Arts	372,533
Lewis Ginter Botanical Garden	330,718
Three Lakes Park & Nature Center	294,070
Meadow Farm	279,423
Children's Museum of Richmond	237,833

Source: Richmond Region Tourism

As noted in numerous publications, and confirmed through our interview with John Berry, President & CEO of Richmond Region Tourism, the city's popularity among young professionals and those seeking food and recreation experiences has steadily increased in recent years, while those seeking historical sites and experiences has decreased as a share of the whole. Additionally, sports tourism has become a major driver of visits in the region.

## HOTEL PERFORMANCE

Hotel occupancy data compiled by STR and provided to CSG by the City of Richmond, comports with the estimated number of annual visitors to the region and indicates that the Richmond-Petersburg, VA region's 22,548 hotel rooms operated at an occupancy rate of 66% and earned an average daily rate (ADR) of \$96 in 2019. Hotel performance in 2020 was drastically impacted by the COVID-19 pandemic, and those same properties operated at an average occupancy rate of only 47% and earned an ADR of \$78.

## EMPLOYMENT AND UNEMPLOYMENT

The labor force in the city of Richmond grew from approximately 105,000 at the start of 2010 to 120,000 at the start of 2020, with seasonality each year adding approximately 3,000 workers during summer months. At the beginning of 2010, emerging from the Great Recession, the Richmond unemployment rate was approximately 10%, but steadily declined to approximately 3% by the end of 2019. As with the rest of the country, the pandemic has had a significant impact on the labor market, with the unemployment rate in the city of Richmond at the end of 2020 at 6.5%. However, this rate indicates considerable recovery from the peak pandemic unemployment rate of 14.1% in April 2020. It should also be noted that relative to December 2019, the labor force in Richmond has shrunk by nearly 3,300 participants, or 2.7%, ending 2020 at 116,571.<sup>8</sup> Table 5 details the monthly unemployment rate for the city of Richmond going back to the year 2010.

**TABLE 5: UNEMPLOYMENT RATE, CITY OF RICHMOND, VA**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>2010</b>	10.1%	10.0%	9.8%	9.2%	9.3%	9.5%	9.7%	9.8%	9.4%	9.1%	9.3%	8.9%
<b>2011</b>	9.1%	8.8%	8.4%	8.1%	8.3%	8.8%	8.7%	9.0%	8.6%	8.3%	7.9%	7.9%
<b>2012</b>	8.2%	7.9%	7.6%	7.1%	7.5%	7.8%	8.0%	7.8%	7.2%	7.0%	6.8%	6.9%
<b>2013</b>	7.7%	7.2%	6.9%	6.4%	6.7%	7.1%	7.0%	7.0%	6.6%	6.6%	6.3%	6.1%
<b>2014</b>	6.7%	6.6%	6.5%	5.7%	6.2%	6.3%	6.6%	6.6%	6.0%	5.7%	5.6%	5.3%
<b>2015</b>	5.9%	5.7%	5.5%	5.0%	5.5%	5.5%	5.5%	5.3%	4.9%	4.6%	4.6%	4.4%
<b>2016</b>	4.8%	4.7%	4.6%	4.3%	4.4%	5.0%	5.1%	5.2%	4.9%	4.6%	4.4%	4.3%
<b>2017</b>	4.9%	4.7%	4.4%	4.1%	4.1%	4.4%	4.4%	4.6%	4.2%	3.9%	3.9%	3.8%
<b>2018</b>	4.2%	4.1%	3.8%	3.3%	3.4%	3.8%	3.7%	3.8%	3.4%	3.2%	3.1%	3.3%
<b>2019</b>	3.9%	3.6%	3.5%	2.9%	3.2%	3.4%	3.6%	3.5%	3.1%	3.0%	2.9%	2.8%
<b>2020</b>	3.5%	3.2%	3.8%	14.1%	12.1%	11.8%	12.1%	9.5%	9.3%	7.6%	6.5%	6.5%

Source: U.S. Bureau of Labor Statistics (accessed 3/1/21)

<sup>8</sup> U.S. Bureau of Labor Statistics



Relative to the Richmond MSA region, unemployment in the city of Richmond has generally been 0.5% to 1.5% higher than the regional average, as demonstrated in Table 6.

**TABLE 6: UNEMPLOYMENT RATE, RICHMOND MSA**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>2010</b>	8.7%	8.6%	8.4%	7.7%	7.8%	8.0%	8.0%	8.1%	7.8%	7.5%	7.7%	7.5%
<b>2011</b>	7.8%	7.6%	7.3%	6.9%	7.1%	7.6%	7.5%	7.7%	7.5%	7.2%	6.8%	6.8%
<b>2012</b>	7.2%	7.1%	6.8%	6.2%	6.6%	6.9%	7.0%	6.8%	6.3%	6.1%	5.9%	6.1%
<b>2013</b>	6.8%	6.5%	6.1%	5.7%	6.0%	6.4%	6.2%	6.2%	6.0%	5.9%	5.6%	5.4%
<b>2014</b>	6.0%	6.0%	5.9%	5.2%	5.5%	5.7%	5.8%	5.8%	5.4%	5.1%	5.1%	4.8%
<b>2015</b>	5.4%	5.2%	5.0%	4.5%	4.9%	4.8%	4.8%	4.6%	4.4%	4.2%	4.1%	4.0%
<b>2016</b>	4.4%	4.3%	4.2%	3.8%	4.0%	4.4%	4.5%	4.5%	4.4%	4.1%	4.0%	3.9%
<b>2017</b>	4.5%	4.4%	4.1%	3.7%	3.8%	4.0%	4.0%	4.1%	3.7%	3.5%	3.5%	3.4%
<b>2018</b>	3.7%	3.6%	3.4%	3.0%	3.0%	3.4%	3.3%	3.4%	3.0%	2.9%	2.8%	3.0%
<b>2019</b>	3.5%	3.3%	3.1%	2.6%	2.8%	3.1%	3.1%	3.2%	2.8%	2.7%	2.6%	2.5%
<b>2020</b>	3.1%	2.8%	3.4%	11.2%	9.4%	8.9%	8.8%	6.9%	6.8%	5.5%	4.9%	5.0%

Source: U.S. Bureau of Labor Statistics (accessed 2/10/21)

Data on employment by sector is provided by the U.S. Bureau of Labor Statistics at the MSA level, for which the Richmond MSA non-farm employment pre-pandemic totaled nearly 700,000. The largest share of non-farm employment in the Richmond MSA is in the Trade, Transportation, & Utilities sector, posting 125,200 jobs in December 2019 and 127,800 jobs in December 2020. This sector is followed closely by the Professional & Business Services sector at 122,000 and 116,800 jobs in December 2019 and 2020, respectively. Leisure & Hospitality, the industry under which resort casino operations employees would fall, employed 65,600 individuals in December 2019, which dropped as low as 39,100 in April 2020 – the peak of pandemic-related unemployment. Since that time, however, there has been significant yet not full recovery in the sector which posted 56,200 jobs in December 2020. Table 7 details these data from the Bureau of Labor Statistics, and our analysis of the potential employment impacts of a Richmond resort casino are detailed in the *Labor Market Impacts* section of this study.

**TABLE 7: NONFARM EMPLOYMENT AND LABOR FORCE DATA, RICHMOND, VA METROPOLITAN STATISTICAL AREA (IN THOUSANDS)**

SECTOR	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg
<b>Total Nonfarm</b>													
2019	676.4	679	680.4	684.9	685.9	691.7	686.7	686.3	684.7	689.8	697.9	696.2	686.7
2020	686.3	690.2	684.2	620.1	625.1	638.2	642.3	651.7	653.5	658.4	664.4	<a href="#">(P)664.4</a>	
<b>Mining, Logging, &amp; Construction</b>													
2019	38.8	38.9	39.5	39.7	40.2	40.3	40.9	41	40.7	41	41.2	41.1	40.3
2020	41.2	41.3	41.3	40.2	39.7	41	40.4	39.8	39.2	39.6	38.8	<a href="#">(P)39.3</a>	
<b>Manufacturing</b>													
2019	31.9	32	31.8	32	32.1	32.2	31.8	31.5	31.4	31.2	31.2	31.2	31.7
2020	30.8	30.9	30.9	29.8	29.8	30.4	29.9	29.7	30.1	30.2	30.2	<a href="#">(P)30.4</a>	
<b>Trade, Transportation, &amp; Utilities</b>													
2019	122	120.5	120.5	120.7	121.6	122	121.6	121.7	121	121.2	123.2	125.2	121.8
2020	120.8	119.7	120.2	110	111.3	115.4	115.6	119.1	119.4	121.3	124.2	<a href="#">(P)127.8</a>	
<b>Information</b>													
2019	6.8	7	6.9	6.8	7.3	7	7	7.1	7	7.1	7.1	7.1	7
2020	7	7.1	7	6.7	6.6	6.6	6.6	6.5	6.5	6.6	6.5	<a href="#">(P)6.6</a>	
<b>Financial Activities</b>													
2019	51.8	52	52	52.3	52.8	53.6	53.7	53.5	53.2	53.1	54.1	53.3	53
2020	54.5	55.8	55	54.4	54.9	54.8	53.4	53	55.7	55.3	55.6	<a href="#">(P)55.0</a>	
<b>Professional &amp; Business Services</b>													
2019	116.9	116.3	115.9	118	118.6	119.6	118.3	119.1	118.8	119.7	122.4	122	118.8
2020	119.6	121.7	117.8	110.2	113.8	113.2	114.8	116.9	115.8	116.5	119	<a href="#">(P)116.8</a>	
<b>Educational &amp; Health Services</b>													
2019	101.6	102.8	102.7	102.6	100.7	100.7	99.7	100.3	101.2	102.3	103.7	102.8	101.8
2020	101.9	102.3	100.6	88.8	91	92.3	93.7	92.5	92.4	93.2	93.5	<a href="#">(P)92.6</a>	
<b>Leisure &amp; Hospitality</b>													
2019	63	63.6	64.9	66.8	68.3	71.1	70.8	70	66.6	67	66.6	65.6	67
2020	64.3	64.1	63.7	39.1	45.1	51.1	55.8	57.8	56.5	57.5	57.3	<a href="#">(P)56.2</a>	
<b>Other Services</b>													
2019	31.7	32	32.3	32.3	32.5	32.9	33.2	33	32.5	32.6	32.6	32.5	32.5
2020	32.2	32.4	32.6	28.8	29	29.4	30.4	30.7	30.4	30.5	30.5	<a href="#">(P)30.3</a>	
<b>Government</b>													
2019	111.9	113.9	113.9	113.7	111.8	112.3	109.7	109.1	112.3	114.6	115.8	115.4	112.9
2020	114	114.9	115.1	112.1	103.9	104	101.7	105.7	107.5	107.7	108.8	<a href="#">(P)109.4</a>	
<b>Footnotes</b>													
<a href="#">(P)</a> Preliminary													

Source: U.S. Bureau of Labor Statistics (accessed 2/10/21)

## GAMING MARKET ASSESSMENT

CSG conducted a series of analyses of the potential visitation and gross gaming revenue generation for resort casino gaming at three general locations in Richmond. The general locations for study were speculative, based partially on news reports, Richmond 300 discussions, and mutually agreed upon with the EDA and the Department of Economic Development:

- Downtown Richmond (modeled at Richmond EDA, 1500 East Main Street);
- South Richmond; and
- Northwest Richmond.

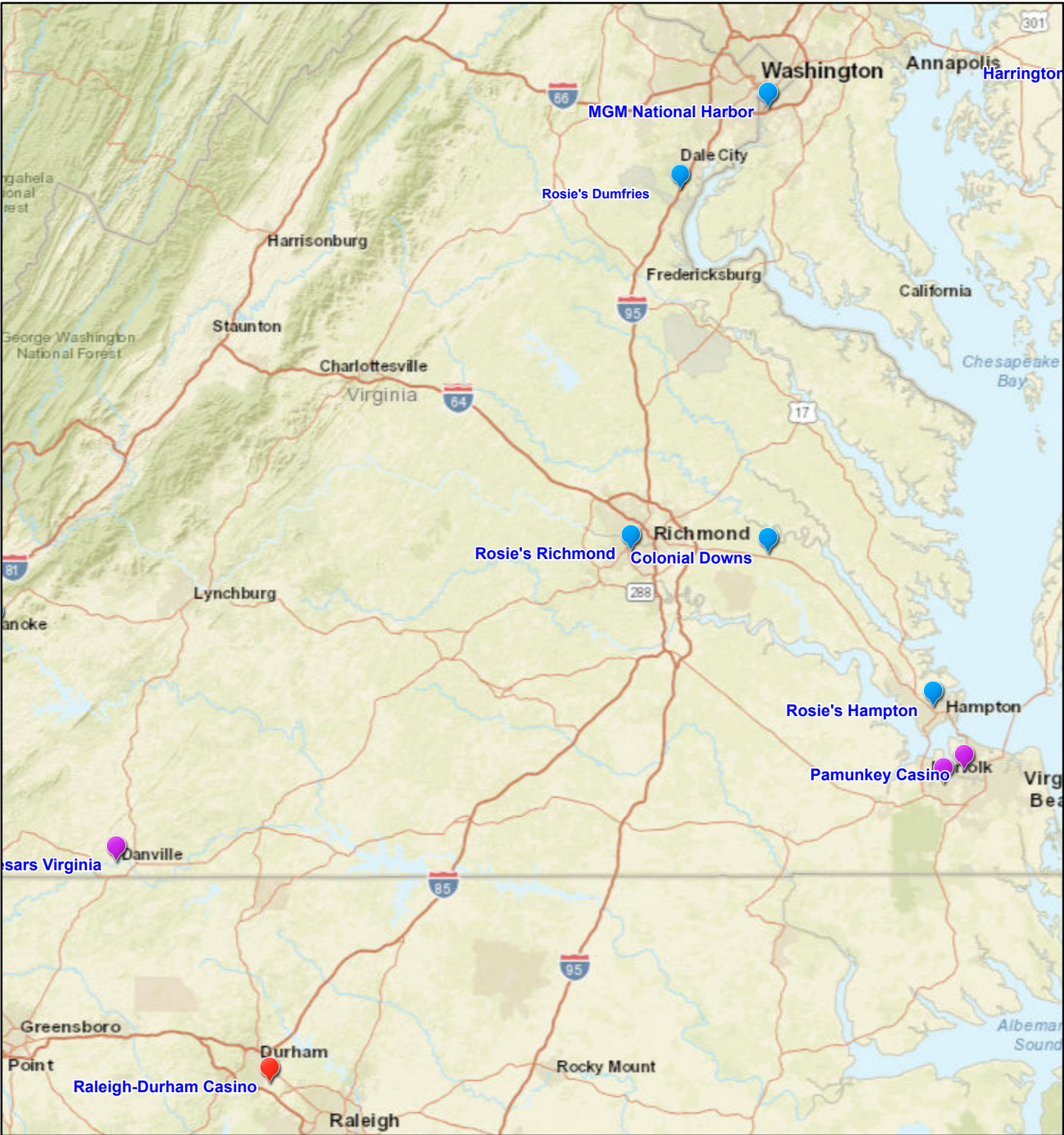
The existing and potential future competitive environments for casino gaming were considered, and a series of custom forecast models were constructed.

## COMPETITIVE ENVIRONMENT

There are not currently any casino operations within the State of Virginia, however, resort casinos have been approved for four cities in the state and its historic horseracing facilities are an attractive form of gaming that will compete with the new resort casino facilities. The nearby states of North Carolina, Maryland, Pennsylvania, West Virginia, and Delaware host multiple casinos that will pose varying levels of competition to a resort casino in Richmond.






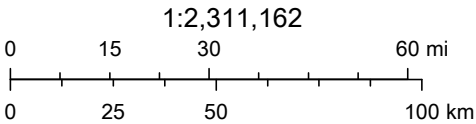
MAP 5: RICHMOND AREA GAMING FACILITIES



March 3, 2021

Existing and Potential Gaming

-  Existing
-  Potential
-  Pending



Esri, HERE, Garmin, NGA, USGS, NPS

**TABLE 8: COMPETITIVE GAMING FACILITIES IN REGIONAL MARKET**

FACILITY	CITY	STATE	SLOTS	TABLES	HHR MACHINES	STATUS
Downtown Richmond	Richmond	VA				Sample Site
Northwest Richmond	Richmond	VA				Sample Site
South Richmond	Richmond	VA				Sample Site
Rosie's at Colonial Downs	New Kent	VA			600	Existing
Rosie's Richmond	Richmond	VA			700	Existing
Rosie's Vinton	Vinton	VA			150	Existing
Rosie's Hampton	Hampton	VA			700	Existing
Rosie's Dumfries	Dumfries	VA			150	Existing*
Rosie's Emporia	Emporia	VA			150	Potential
Rush St. Portsmouth	Portsmouth	VA	1,500	35		Pending
Pamunkey Casino	Norfolk	VA	3,000	125		Pending
Caesars Virginia	Danville	VA	2,000	75		Pending
Hard Rock Bristol	Bristol	VA	1,250	15		Pending
Raleigh-Durham Casino	Durham	NC	2,000	60		Potential
Greensboro Casino	Greensboro	NC	2,000	50		Potential
MGM National Harbor	Oxon Hill	MD	3,137	207		Existing
Live! Casino & Hotel Arundel Mills	Hanover	MD	3,852	191		Existing
Horseshoe Casino Baltimore	Baltimore	MD	2,200	178		Existing
Hollywood Casino Perryville	Perryville	MD	850	22		Existing
Hollywood Casino at Penn National	Grantville	PA	2,002	85		Existing
Hollywood Casino at Charles Town Races	Charles Town	WV	2,300	89		Existing
Mardi Gras Casino	Cross Lanes	WV	776	47		Existing
Catawba	Kings Mountain	NC	1,800	54		Pending
Harrington Raceway	Harrington	DE	1,730	31		Existing
Ocean Downs	Berlin	MD	892	18		Existing
Dover Downs	Dover	DE	2,240	42		Existing

Source: State gaming commissions; casino websites; casinocity.com. \*potentially to shift to larger resort-scale with up to 1,800 devices.

## EXISTING GAMING FACILITIES

### CASINO FACILITIES

The regional gaming market is comprised of casinos to the north in Maryland and West Virginia, and to the east in Delaware. There are casinos further afield in Pennsylvania and New Jersey, as well as to the southwest in the Smoky Mountains region of North Carolina, but these facilities would have negligible overlap with potential Richmond resort casino demand.

Delaware casino gaming is governed by the State Lottery, with gaming facilities initially opening with video lottery machines in 1995 and 1996, later approving table games in 2009. The facilities were then also permitted to operate internet gaming starting in 2012, as well as sports betting starting in 2018 (parlay wagering on pro football had been permissible beginning in 2010). The effective tax rate on slots (and other electronic gaming devices) in Delaware is 57%, and 20% on table games. These rates are inclusive of required distributions for the racing industry (purse enhancements). Operators retain 35% of sports betting revenues. The Lottery provides for no allocation of gaming taxes back to host jurisdictions. In 2019 the state's three gaming facilities generated gross gaming revenues of

approximately \$437 million, though this was led by Delaware Park, located proximate to Philadelphia (well outside of the region serving Richmond), accounting for approximately 40% of the total.<sup>9</sup>

The first gaming facilities in West Virginia opened with video lottery machines in 1994, with Hollywood Casino at Charles Town Races being the last of four racetrack casinos to open, in 1997. West Virginia legalized table gaming in 2007. A final gaming facility, located at the historic Greenbriar Resort, opened in 2010, though Hollywood is the only casino in the state that may have some overlap with Richmond's gaming market. The effective tax rate on electronic gaming devices is 53.5%, 35% on table games and 10% on sports betting. An additional excise tax equating to 0.25% of sports betting handle is also applied. A share of the gaming taxes goes to local governments, as local counties and municipalities receive 2% of video lottery revenues and 5.5% of table gaming revenues.<sup>10</sup>

Casinos in Maryland were the last in the region to open, with the six licensed facilities opening on a more staggered schedule than most markets. The first casino to open was Hollywood Casino in Perryville, more proximate to the Philadelphia market, in September 2010. Shortly thereafter (January 2011), Ocean Downs opened in Berlin, followed by Live! in Anne Arundel County in June 2012. The state's smallest facility, Rocky Gap Casino Resort, opened in May 2013, followed by Horseshoe in Baltimore in August 2014. The final casino in the market to open was MGM National Harbor, serving the D.C. market (in the town of Oxon Hill), in December 2016. The initial casinos were only permitted to operate slot machines, but in November 2012 voters approved by referendum the addition of table gaming. MGM National Harbor and Live! are among the most lucrative commercial casinos in the U.S. outside of Nevada. Gaming tax rates vary by property, with taxes on electronic games ranging from 40% to 61%, while table games are taxed at a flat, uniform 20%. In 2019, the state generated \$727 million in gaming taxes, of which approximately \$62 million was distributed in the form of local impact grants and contributions to local governments.<sup>11</sup>

## HISTORICAL HORSERACING (HHR) FACILITIES

Virginia expanded parimutuel wagering offerings at Colonial Downs in 2019 with the addition of historical horseracing machines, which are inter-linked, parimutuel wagering devices with payouts based off a central server running an actual, old horse race (not identifiable which race to the player), but from a player's perspective, the devices strongly resemble (both in terms of visuals and payouts) traditional video slot machines.

All of the HHR facilities in Virginia are operated by the Colonial Downs group, opening a total of four facilities statewide in 2019 and one in 2021 (all operating under the "Rosie's" brand), with the State controlling how many devices are permissible per facility and in aggregate. In addition to the Colonial Downs facility, there is a Rosie's in west Richmond, in Vinton (Roanoke market), in Hampton (northwest Norfolk market) and the newest in Dumfries (opening in January 2021, but proposed to shift to a resort concept at an alternative Dumfries site by 2023, closing the recently-opened one).<sup>12</sup>

The HHR facilities are under the licensure of the Virginia Racing Commission. The gaming tax equates to 1.25% of pari-mutuel handle, of which the State gets 0.75% and local governments get the 0.5%

---

<sup>9</sup> Delaware Lottery website, net proceeds reports for 2019. <https://www.delottery.com/Financials/Where-The-Money-Goes>, accessed February 13, 2021.

<sup>10</sup> West Virginia Lottery 2019 Annual Report. [WVL2019AR.pdf \(wvlottery.com\)](https://www.wvlottery.com/WVL2019AR.pdf), pages 44-46.

<sup>11</sup> American Gaming Association "State of the States 2020". [AGA-2020-State of the States.pdf \(americangaming.org\)](https://www.americangaming.org/AGA-2020-State-of-the-States.pdf), page 60.

<sup>12</sup> Uriah Kiser, "Resort Casino Proposed to Open in Dumfries in January 2023", [Potomaclocal.com](https://potomaclocal.com), February 15, 2021. <https://potomaclocal.com/2021/02/15/resort-casino-proposed-to-open-in-dumfries-in-january-2023/>. The new HHR facility opened with 125 devices but is expected to offer 150. If a resort is developed in Dumfries, they will be allowed to operate up to 1,800 HHR devices at the site.



balance. In the case of Colonia Downs, New Kent County receives the 0.5%. For Rosie's Richmond, the 0.5% for local governments is split evenly between New Kent County and the City of Richmond. Taxation on handle is different from a taxation on win, such that they are only moderately comparable. Payouts generally range from 91% to 92% of handle, such that the effective gaming tax rate is roughly in the 14% to 15.5% range of HHR win (used here for the purpose of comparing to casino tax rates), such that the City of Richmond's share representing 0.25% of handle roughly equates to 3% of gaming win; at approximately \$34 million in annual gaming win, the City of Richmond's share of gaming tax revenue from Rosie's Richmond is therefore approximately \$1 million out of the total tax of approximately \$5 million. It should be noted that this is not the sole allocation of win paid out by HHR facilities -they have additional operating expenses, as they are required to pay 6% of the 1<sup>st</sup> \$60 million in HHR revenues (net of free play) and 7% thereafter as purse subsidies, and 11.5% of HHR revenues to the system/game provider. As a result, taxes and fees imposed on HHR operations equate to approximately 32% to 33% of win.

The facilities were closed from mid-March through June 2019 due to the pandemic, but have been operational since July. Revenues for most of the properties have already reverted to pre-pandemic levels. The following table presents the historical performance of each of the HHR facilities in the state, from inception. Due to business interruptions and the staggered introduction of Rosie's facilities during 2019, for modeling purposes we also provide our current estimate of what should be annualized revenues for each of the properties (with the exception of Dumfries, as it is too premature to make an annualized estimate based on only three weeks of operation).

**TABLE 9: MONTHLY VIRGINIA HHR PERFORMANCE SINCE INCEPTION**

	COLONIAL	VINTON	RICHMOND	HAMPTON	DUMFRIES	TOTAL
Apr-19	\$973,402					\$973,402
May-19	\$3,971,043	\$794,673				\$4,765,716
Jun-19	\$4,657,953	\$1,550,626	\$145,092			\$6,353,671
Jul-19	\$3,757,243	\$1,740,037	\$4,590,761			\$10,088,041
Aug-19	\$3,898,896	\$1,835,243	\$4,902,894			\$10,637,033
Sep-19	\$3,610,851	\$1,785,682	\$5,410,030			\$10,806,563
Oct-19	\$3,499,601	\$1,730,586	\$5,310,441	\$638,057		\$11,178,685
Nov-19	\$2,611,775	\$1,689,404	\$5,414,821	\$4,386,353		\$14,102,353
Dec-19	\$2,443,765	\$1,787,366	\$5,422,101	\$4,661,868		\$14,315,100
Jan-20	\$2,741,816	\$1,906,930	\$6,051,113	\$5,341,909		\$16,041,768
Feb-20	\$2,807,413	\$1,996,874	\$6,315,707	\$5,843,706		\$16,963,700
Mar-20	\$1,365,502	\$1,014,801	\$3,179,315	\$2,963,914		\$8,523,532
Apr thru Jun-20	\$0	\$0	\$0	\$0		\$0
Jul-20	\$3,179,891	\$1,590,749	\$5,098,371	\$4,463,997		\$14,333,008
Aug-20	\$2,872,436	\$1,747,682	\$5,571,834	\$4,934,152		\$15,126,104
Sep-20	\$2,819,323	\$1,672,858	\$5,464,713	\$4,960,021		\$14,916,915
Oct-20	\$3,160,296	\$1,745,265	\$6,184,747	\$5,532,778		\$16,623,086
Nov-20	\$2,613,025	\$1,614,374	\$5,025,268	\$4,833,292		\$14,085,959
Dec-20	\$2,514,422	\$1,510,887	\$5,440,976	\$4,682,184		\$14,148,469
Jan-21	\$3,023,183	\$1,670,667	\$5,547,379	\$4,799,925	\$1,071,937	\$16,113,091
Devices	600	150	700	700	125	2,275
Annualized est.	\$34,100,000	\$20,300,000	\$65,700,000	\$60,600,000		
Est. Win/device/day	\$156	\$93	\$300	\$277	\$373 (prel.)	\$230 (n.i. Dumfries)

Sources: Virginia Racing Commission. Annualized estimate by CSG based on average performance through December 2020.

## PLANNED AND POTENTIAL GAMING FACILITIES

In addition to the proposed HHR resort in Dumfries, four resort casinos have been proposed and approved through referenda in cities across Virginia – Norfolk, Portsmouth, Danville and Bristol. Each of the four planned resort casinos are subject to the same legislation that a resort casino in Richmond will be in terms of tax rates and other regulations.

The casino resort in Norfolk is planned by the Pamunkey Tribe. The city had an obligation to give preference to the Pamunkey Tribe for casino licensure, therefore there was no competitive bid process there. Details on the Pamunkey resort have not been in-depth (though they likely will be in a response if the Tribe bids on a resort casino license in Richmond). An initial announcement was a plan for it to be a \$500 million resort casino, with 3,000 slots and 125 table games in the casino, a 300-room hotel, a 2,500-seat entertainment venue and 4 to 5 restaurants, on a 13.4-acre plot.<sup>13</sup> An alternative plan considered is for it to be a \$350 million development, with the casino scaled down to 2,170 slots and 100 table games, with 200 guest rooms and 2 to 4 restaurants.<sup>14</sup>

The casino resort in Portsmouth is planned by Rush Street Gaming, operators of the largest casino in Illinois, as well as casinos in Philadelphia, Pittsburgh and Schenectady, New York. Rush Street plans a \$300-million development with a hotel, indoor and outdoor entertainment venues, food and beverage venues and conference space. Rush Street has announced that the facility will be 400,000 square feet, but has not announced a mix of slots and tables.

Casinos in Danville and Bristol are more proximate to the North Carolina border, with less of a regional overlap with Richmond (essentially no overlap for the Bristol casino, which will be operated by Hard Rock). The resort casino in Danville was a competitive bid process won by Caesars Entertainment. The Caesars facility will have a casino with 2,000 slots and 50 table games, a 300-room hotel, 2,500-seat entertainment venue, 35,000 square feet of conference space, a spa and broad food and beverage offerings.<sup>15</sup>

In February 2021 an additional Rosie's facility proposed for the city of Emporia, Virginia, proximate to Interstate 95 on the North Carolina state line was proposed, sized at 150 gaming positions. The proposal is expected to go to a referendum in November, such that 2022 would be a possible opening year.<sup>16</sup>

A casino further to the south in North Carolina, to be operated by the Catawba Tribe, recently received an agreement with the state to commence development. The casino resort, currently under development in Kings Mountain, is on the western outskirts of Charlotte, more than 300 miles (4+ hours drive time) from Richmond. Given the expected developments in Danville and Bristol, the Catawba development has negligible impact on Richmond gaming market potential.

---

<sup>13</sup> "Virginia: Norfolk Confirms Pamunkey Tribe for Casino Project, but it won't be on Tribal Land", *Yogonet Gaming News*, May 29, 2020. <https://www.yogonet.com/international/noticias/2020/05/29/53401-virginia-norfolk-confirms-pamunkey-tribe-for-casino-project-but-it-wont-be-on-tribal-land>.

<sup>14</sup> Memo from Dr. Chip Filer, Norfolk City Manager, to Co-Chairs of Mayor's Committee on Gaming, re: "Staff Report – Impacts of a Casino Hotel on the City of Norfolk", dated September 25, 2020. <https://www.norfolk.gov/DocumentCenter/View/62929/Casino-Hotel-Staff-Report-Final>, pages 13-14, accessed February 16, 2021.

<sup>15</sup> Caesars Virginia website. <https://caesarsfordanville.com/project-details/>, accessed February 16, 2021.

<sup>16</sup> Mark Mathews, "Colonia Downs Launching Effort in Emporia", *Emporia Independent Messenger*, February 24, 2021. [https://www.emporiaindependentmessenger.com/news/article\\_97e924f8-76c6-11eb-b12e-bf000dffd3a9.html](https://www.emporiaindependentmessenger.com/news/article_97e924f8-76c6-11eb-b12e-bf000dffd3a9.html)

## CASINO GAMING FORECAST

### REGIONAL MARKET

We assess the demand for casino gaming through multiple models: drive-time based gravity models for the regional market living within an approximate 2.5-hour drive of Downtown Richmond; hotel incremental models for this market; and out-of-market models for tourists and visitors to the area. The drive-time based gravity model projections of demand are discussed herein, with the other segments to follow later in this study.

### GRAVITY MODEL METHODOLOGY

In competitive gaming markets, gravity models are the most widely used tool to determine local and regional market demand and the distribution of that demand between different properties. The general format of gravity models is that size and attractiveness of properties are factors that pull patrons towards a specific property, whereas distance from a property exponentially detracts a patron from visiting a specific property. Rather than constructing a standard “crow-flies” gravity model, wherein the straight-line distance between each zip code in the market to each competitive property is calculated based upon geographic coordinates (X, Y), we constructed a drive-time gravity model. For this model, the real-world drive times from each ZIP Code (at the centroid) in the market to each competitive property<sup>17</sup> were derived from ArcGIS, the geographic information system of Redlands, California-based ESRI<sup>18</sup>. The result is a model that more accurately assesses the relationships between the people and places in a market.

The first step in forecasting the potential visitation and revenue generation of the proposed facilities is the construction and calibration of base models which re-create existing conditions. A base model was calibrated to re-create the visitation and revenue generation of the existing gaming facilities in the marketplace in 2019, as well as our estimate of annualize revenues for the Virginia HHR facilities (we considered 2019 as a base year since all facilities were operational for the full year and not impacted by the pandemic – we further perceive that the pandemic will have no long-term impacts on gaming revenues, as most properties are already attaining monthly revenues comparable to what they attained pre-pandemic). Reported gross gaming revenues of each facility were critical factors in our models.

In calibrating the model, CSG drew from proprietary data sets on the prevalence of casino gaming participation segmented by ZIP Code of residence. Such data enabled CSG to refine our models so that they more accurately reflect the current marketplace and consumer behaviors. As seen across the world, the addition of casino gaming options to an area results in an increase in gaming behavior – as adults have increased access to casinos, the propensity of those adults to be gamers increases as does the frequency of their play.

Win per Visit was estimated through a comparative analysis of the average household incomes of the population, as well as the historical gaming revenues of the facilities in the market. Gaming participation in the gravity model was estimated through the application of propensity, frequency, and market index factors. CSG estimated the average propensity to participate in gaming by the adult population in the market, and the average annual frequency of visitation for those that do participate,

---

<sup>17</sup> Per ESRI specifications for drive times, “measurements are made along roads or walkways, and they honor applicable rules, such as one-way streets, illegal turns, and so on.” Due to the complex nature of the area traffic environment, no one day or time was selected for drive time comparison, rather drive times were calculated at the average travel time from one point to another.

<sup>18</sup> ESRI is the global market leader in GIS, with its ArcGIS product as the standard platform for government agencies across the United States, most national governments worldwide, as well as the private sector.

based on national average participation rates and knowledge we have gained from proprietary access to player databases of existing casinos nationwide, with the ultimate goal of calibrating the model's actual revenues by property to actual demographics in the region (while accounting for the fact that a share of revenues for each property may be from outside of the Richmond 2.5-hour ring, and/or from tourists).

For expansion models we consider participation rate averages for markets where full-scale casinos are more easily accessible, as will be the case in Virginia by 2024, taking into consideration the locations of the casinos, drive times and the prevalence indices of each of the market areas, as presented in Table 10.

**TABLE 10: RICHMOND MARKET AREA, GAMBLER IN A CASINO IN LAST 12 MONTHS (INDEX)**

MARKET AREA	INDEX
Richmond Downtown Core <sup>1</sup>	104
South Richmond <sup>2</sup>	100
Northwest Glen Allen <sup>3</sup>	107
West Richmond <sup>4</sup>	110
30 min North <sup>5</sup>	105
Midlothian <sup>6</sup>	98
Montrose Airport <sup>7</sup>	98
30 to 60 min North <sup>8</sup>	94
45 min South <sup>9</sup>	93
90 min Charlottesville <sup>10</sup>	99
90 min NorthEast <sup>11</sup>	104
90 min South <sup>12</sup>	73
90 min SouthEast <sup>13</sup>	100
30 min South <sup>14</sup>	109
Harrisonburg Culpeper <sup>15</sup>	94
Norfolk VA Beach Suffolk <sup>16</sup>	105
150 min North <sup>17</sup>	113
150 min North Carolina East <sup>18</sup>	81
150 min North Carolina Raleigh <sup>19</sup>	99
150 min Danville <sup>20</sup>	78
150 min West <sup>21</sup>	92
Washington DC <sup>22</sup>	114
DC Suburbs VA <sup>23</sup>	113
Outer DC Maryland <sup>24</sup>	113

Source: ESRI; CSG market designation

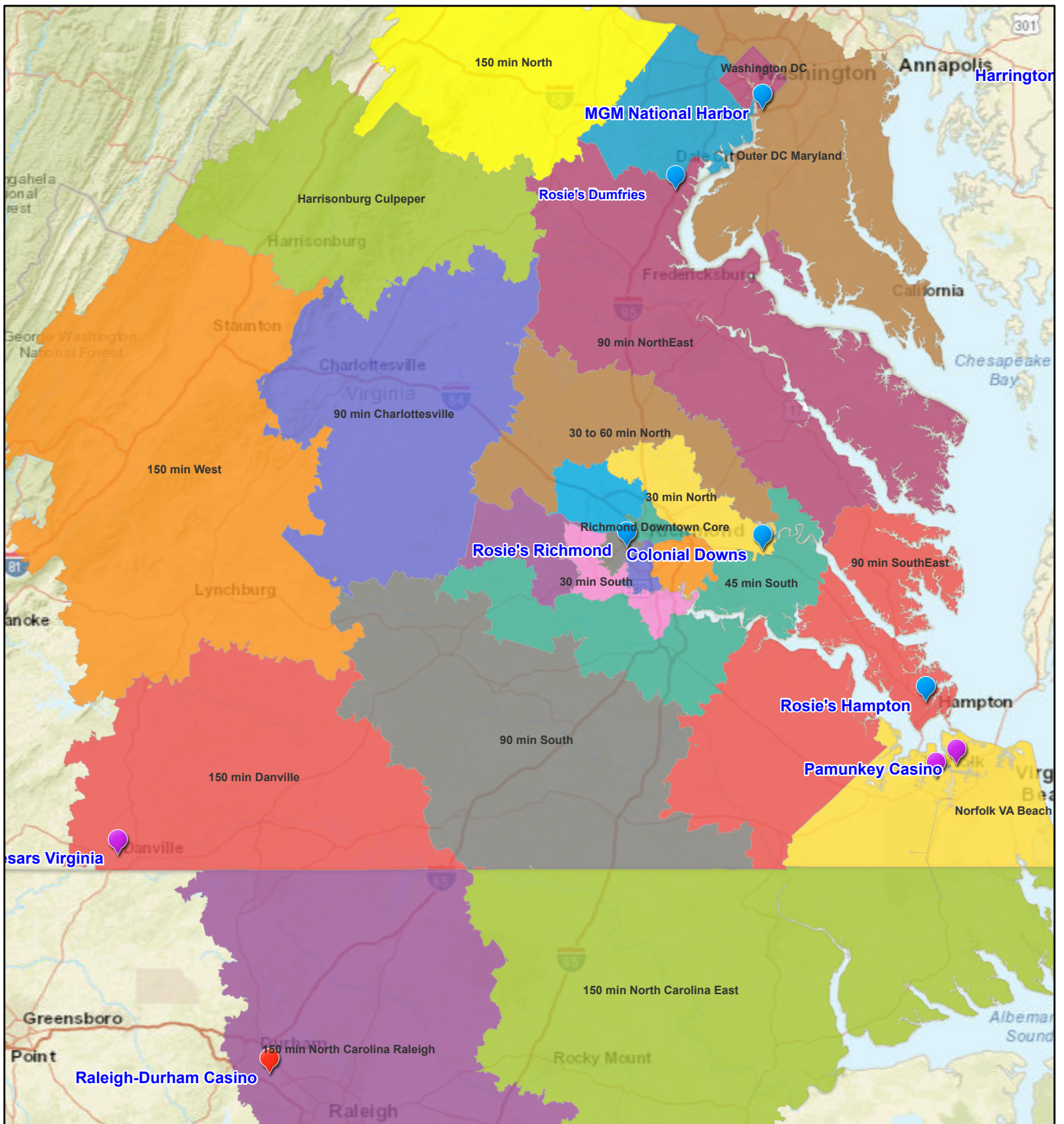
## SUB-MARKET REGIONS

In consideration of the geographic dispersal of the regional population, drive-times to Downtown Richmond, and the locations of existing and future competition, we carved the region surrounding into 24 distinct market areas extending out approximately 2.5 hours from Downtown Richmond. This market area carve-out is as demonstrated in

*Map 6*, with demographics related to adult population bases and average household income levels by market area presented in *Table 11* and *Table 12*. In total, approximately 9.3 million adults reside in the region, with projected growth to 9.9 million by 2025 (average annual growth of 1.1%, with most all market areas projected to be growing). Average household incomes in the region as a whole were estimated at \$95,595, with projected growth Average household incomes in the region were \$95,595 in 2020, with projected growth to \$104,272 (CAGR of 1.75%) by 2025. This is slightly skewed by high income levels in the greater DC area market, with incomes in some of the defined Richmond area markets and along the North Carolina border being well below the regional average, as evident in *Table 12*.






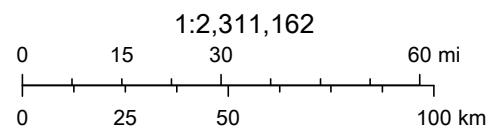
## MAP 6: RICHMOND GAMING MARKET AREAS



March 3, 2021

Existing and Potential Gaming

-  Existing
-  Potential
-  Pending



Esri, HERE, Garmin, NGA, USGS, NPS

**TABLE 11: RICHMOND MARKET AREA GAMING AGE (21+) POPULATION**

SUBMARKET	2020	2021	2022	2023	2024	2025	CAGR 2020- 2025
Richmond Downtown Core1	138,904	140,372	141,856	143,355	144,871	146,402	1.06%
South Richmond2	77,526	78,336	79,154	79,981	80,816	81,660	1.04%
Northwest Glen Allen3	184,373	186,021	187,684	189,362	191,055	192,763	0.89%
West Richmond4	79,413	80,049	80,690	81,337	81,988	82,645	0.80%
30 min North5	79,993	81,304	82,636	83,989	85,365	86,764	1.64%
Midlothian6	29,692	30,276	30,871	31,477	32,096	32,727	1.97%
Montrose Airport7	38,044	38,530	39,022	39,521	40,026	40,537	1.28%
30 to 60 min North8	58,030	59,182	60,356	61,554	62,775	64,021	1.98%
45 min South9	138,653	139,496	140,344	141,197	142,055	142,919	0.61%
90 min Charlottesville10	209,507	211,683	213,881	216,102	218,346	220,614	1.04%
90 min NorthEast11	441,102	447,850	454,700	461,656	468,718	475,888	1.53%
90 min South12	99,969	99,783	99,597	99,411	99,226	99,041	-0.19%
90 min SouthEast13	458,626	460,043	461,464	462,889	464,319	465,753	0.31%
30 min South14	161,991	164,412	166,868	169,362	171,892	174,461	1.49%
Harrisonburg Culpeper15	167,088	168,444	169,811	171,189	172,578	173,978	0.81%
Norfolk VA Beach Suffolk16	845,498	850,632	855,798	860,995	866,224	871,484	0.61%
150 min North17	425,081	435,248	445,658	456,317	467,231	478,406	2.39%
150 min North Carolina East18	358,599	359,438	360,278	361,121	361,965	362,812	0.23%
150 min North Carolina Raleigh19	1,321,828	1,346,686	1,372,012	1,397,815	1,424,102	1,450,884	1.88%
150 min Danville20	130,635	130,039	129,446	128,856	128,268	127,683	-0.46%
150 min West21	335,866	337,359	338,858	340,364	341,877	343,396	0.44%
Washington DC22	784,298	795,548	806,959	818,534	830,276	842,185	1.43%
DC Suburbs VA23	1,190,862	1,202,496	1,214,245	1,226,107	1,238,086	1,250,182	0.98%
Outer DC Maryland24	1,625,775	1,639,904	1,654,157	1,668,533	1,683,034	1,697,661	0.87%
<b>Total</b>	<b>9,381,353</b>	<b>9,483,129</b>	<b>9,586,345</b>	<b>9,691,024</b>	<b>9,797,190</b>	<b>9,904,866</b>	<b>1.09%</b>

Source: ESRI; CSG market designation and analysis

**TABLE 12: RICHMOND MARKET AREA AVERAGE HOUSEHOLD INCOMES**

	2020	2021	2022	2023	2024	2025	CAGR 2020- 2025
Richmond Downtown Core1	\$72,371	\$73,649	\$74,949	\$76,272	\$77,619	\$78,989	1.77%
South Richmond2	\$60,553	\$61,500	\$62,462	\$63,439	\$64,432	\$65,440	1.56%
Northwest Glen Allen3	\$117,434	\$119,662	\$121,932	\$124,245	\$126,601	\$129,003	1.90%
West Richmond4	\$88,150	\$89,795	\$91,470	\$93,177	\$94,916	\$96,687	1.87%
30 min North5	\$112,303	\$114,179	\$116,087	\$118,027	\$119,999	\$122,004	1.67%
Midlothian6	\$119,973	\$122,070	\$124,202	\$126,373	\$128,581	\$130,827	1.75%
Montrose Airport7	\$75,007	\$76,416	\$77,850	\$79,312	\$80,801	\$82,319	1.88%
30 to 60 min North8	\$95,378	\$96,868	\$98,381	\$99,917	\$101,478	\$103,063	1.56%
45 min South9	\$75,062	\$76,412	\$77,787	\$79,186	\$80,610	\$82,060	1.80%
90 min Charlottesville10	\$93,652	\$95,376	\$97,133	\$98,921	\$100,743	\$102,598	1.84%
90 min NorthEast11	\$111,261	\$113,153	\$115,078	\$117,036	\$119,026	\$121,051	1.70%
90 min South12	\$58,070	\$58,995	\$59,934	\$60,888	\$61,858	\$62,843	1.59%
90 min SouthEast13	\$82,679	\$84,170	\$85,687	\$87,232	\$88,804	\$90,405	1.80%
30 min South14	\$109,020	\$110,848	\$112,706	\$114,595	\$116,516	\$118,470	1.68%
Harrisonburg Culpeper15	\$72,303	\$73,490	\$74,697	\$75,923	\$77,170	\$78,437	1.64%
Norfolk VA Beach Suffolk16	\$90,109	\$91,683	\$93,285	\$94,915	\$96,574	\$98,262	1.75%
150 min North17	\$152,301	\$154,940	\$157,624	\$160,356	\$163,134	\$165,961	1.73%
150 min North Carolina East18	\$60,372	\$61,566	\$62,784	\$64,025	\$65,292	\$66,583	1.98%
150 min North Carolina Raleigh19	\$93,937	\$95,847	\$97,797	\$99,786	\$101,815	\$103,886	2.03%
150 min Danville20	\$55,659	\$56,491	\$57,336	\$58,193	\$59,064	\$59,947	1.50%
150 min West21	\$68,818	\$69,952	\$71,104	\$72,275	\$73,465	\$74,675	1.65%
Washington DC22	\$141,394	\$144,192	\$147,044	\$149,954	\$152,920	\$155,946	1.98%
DC Suburbs VA23	\$158,830	\$161,360	\$163,931	\$166,543	\$169,197	\$171,893	1.59%
Outer DC Maryland24	\$129,644	\$131,871	\$134,136	\$136,440	\$138,784	\$141,168	1.72%
<b>Average</b>	<b>\$95,595</b>	<b>\$97,270</b>	<b>\$98,975</b>	<b>\$100,710</b>	<b>\$102,475</b>	<b>\$104,272</b>	<b>1.75%</b>

Source: ESRI; CSG market designation and analysis

The following demand projections are based on what can be defined as the “First Stabilized Year of Operation”. The figures are based on projection economic and demographic data for the year 2024, but more importantly, reflect the potential performance of a casino resort fully developed, including a fully-trained staff and maturation of marketing efforts. It typically takes 2 to 3 years for a new casino to reach what can be defined as “stabilized operations”, with years 1 and 2 showing a ramp-up of demand, falling short of stabilized potential; year 1 it is common to attain 87 to 90% of potential demand (especially if the resort opens while some amenities and/or roadway infrastructure are still under construction), and year 2 approximately 94 to 97% of potential demand. After year 3, growth is generally organic in terms of inflation and population changes, as well as overall changes to regional tourism.

## LOCATION 1: DOWNTOWN RICHMOND

CSG is not suggesting a ranking of where in Richmond is an optimal location for resort casino development, rather we have drawn a concurrence with City leaders as to where sites are likely to be proposed, from a broad perspective (i.e., neighborhood or part of town, not a specific parcel). In the

case of Downtown Richmond, our presumption is that it would be sufficiently proximate to the convention center so as to have a goal of supporting tourism and business travel.

From a regional gaming market perspective, our predictive gravity model concludes a gaming revenue potential of \$285.7 million from the regional market, not including incremental value of regional patrons staying overnight at the resort casino (the incremental value is discussed further below), assuming the HHR facility in Dumfries remains a small, 150-device venue and does not shift to a large, resort concept. This demand is projected to result from 2.36 million annual gamer visits. The Richmond Downtown and Northwest Glen Allen market areas collectively account for approximately 34% of the projected regional gamer visitation and 31% of the projected regional gamer casino win, and collectively the four Richmond market areas would account for approximately 45% of the patronage and 41% of the casino win. These percentages will get diluted when considering the incremental demand emanating from hotel guests and tourists, as discussed further below.

**TABLE 13: POTENTIAL REGIONAL MARKET GAMING PATRONAGE AND REVENUES, DOWNTOWN RICHMOND SITE**

MARKET AREA	GAMER VISITS	WIN PER VISIT	GAMING REVENUE (MMS)
Richmond Downtown Core <sup>1</sup>	402,067	\$108.63	\$43.7
South Richmond <sup>2</sup>	138,578	\$106.23	\$14.7
Northwest Glen Allen <sup>3</sup>	398,768	\$117.77	\$47.0
West Richmond <sup>4</sup>	111,959	\$111.83	\$12.5
30 min North <sup>5</sup>	158,765	\$116.73	\$18.5
Midlothian <sup>6</sup>	24,326	\$118.29	\$2.9
Montrose Airport <sup>7</sup>	84,279	\$109.16	\$9.2
30 to 60 min North <sup>8</sup>	40,207	\$113.30	\$4.6
45 min South <sup>9</sup>	97,146	\$109.17	\$10.6
90 min Charlottesville <sup>10</sup>	46,342	\$112.95	\$5.2
90 min NorthEast <sup>11</sup>	148,206	\$116.52	\$17.3
90 min South <sup>12</sup>	25,482	\$105.73	\$2.7
90 min SouthEast <sup>13</sup>	93,631	\$110.72	\$10.4
30 min South <sup>14</sup>	181,674	\$116.07	\$21.1
Harrisonburg Culpeper <sup>15</sup>	25,337	\$108.61	\$2.8
Norfolk VA Beach Suffolk <sup>16</sup>	55,203	\$112.23	\$6.2
150 min North <sup>17</sup>	52,530	\$124.85	\$6.6
150 min North Carolina East <sup>18</sup>	35,702	\$106.19	\$3.8
150 min North Carolina Raleigh <sup>19</sup>	156,378	\$113.01	\$17.7
150 min Danville <sup>20</sup>	12,791	\$105.24	\$1.3
150 min West <sup>21</sup>	69,852	\$107.91	\$7.5
Washington DC <sup>22</sup>	20,656	\$122.64	\$2.5
DC Suburbs VA <sup>23</sup>	70,368	\$126.18	\$8.9
Outer DC Maryland <sup>24</sup>	67,212	\$120.25	\$8.1
<b>Total:</b>	<b>2,359,221</b>	<b>\$121.08</b>	<b>\$285.7</b>

Source: CSG analysis

If the Dumfries facility is moved within the town to a site with an HHR resort concept (and substantially more devices), only a small fraction of gaming demand for the facility would be from gamers that would otherwise patronize a Richmond resort casino facility. The projected Richmond gaming demand from the regional market would fall to \$277.5 million in gaming revenues from 2.30 million gamer visits. If a

150-device HHR facility is developed in Emporia, we estimate it could generate revenues of approximately \$20 million per year, of which approximately half would be incremental to the market, and half (\$10 million) would roughly be equally cannibalized from the casinos in Danville, Portsmouth, Norfolk and Richmond. As such, if developed, an Emporia HHR facility could impact Richmond resort casino market potential by \$2 to \$3 million.

In our base model, Rosie's Richmond is estimated to generate \$64.4 million annually from the regional market. As a result of regional gaming expansion (all new facilities, not just a Downtown Richmond resort casino), the projected Rosie's Richmond revenues would fall to \$39.5 million. If the Dumfries facility is resort-scale, the revenues would fall to \$38.6 million.

## LOCATION 2: SOUTH RICHMOND

In the case of a potential resort casino in the South Richmond area, our presumption is that it would be proximate to the interchange of I-95 and Route 895 so as to enjoy excellent highway accessibility.

From a regional gaming market perspective, our predictive gravity model concludes a gaming revenue potential of \$270.8 million from the regional market if the Dumfries facility remains a small HHR venue, not including incremental value of regional patrons staying overnight at the resort casino (the incremental value is discussed further below). This demand is projected to result from 2.25 million annual gamer visits. The source of demand for a South Richmond resort casino is more dispersed than the Downtown Richmond location, with the four defined Richmond market areas collectively account for approximately 41% of both the projected regional market visitation (with the Downtown market area being the largest segment at 14%) and the regional market gaming win. As with the alternative sites, we note that these percentages all get diluted as tourists and hotel guests are added to the totals.



**TABLE 14: POTENTIAL REGIONAL MARKET GAMING PATRONAGE AND REVENUES, SOUTH RICHMOND SITE**

MARKET AREA	GAMER VISITS	WIN PER VISIT	GAMING REVENUE (MMS)
Richmond Downtown Core <sup>1</sup>	321,843	\$108.63	\$35.0
South Richmond <sup>2</sup>	208,516	\$106.23	\$22.2
Northwest Glen Allen <sup>3</sup>	296,311	\$117.77	\$34.9
West Richmond <sup>4</sup>	96,632	\$111.83	\$10.8
30 min North <sup>5</sup>	108,568	\$116.73	\$12.7
Midlothian <sup>6</sup>	23,671	\$118.29	\$2.8
Montrose Airport <sup>7</sup>	72,186	\$109.16	\$7.9
30 to 60 min North <sup>8</sup>	32,270	\$113.30	\$3.7
45 min South <sup>9</sup>	133,489	\$109.17	\$14.6
90 min Charlottesville <sup>10</sup>	41,239	\$112.95	\$4.7
90 min NorthEast <sup>11</sup>	125,780	\$116.52	\$14.7
90 min South <sup>12</sup>	30,194	\$105.73	\$3.2
90 min SouthEast <sup>13</sup>	94,384	\$110.72	\$10.5
30 min South <sup>14</sup>	239,514	\$116.07	\$27.8
Harrisonburg Culpeper <sup>15</sup>	22,069	\$108.61	\$2.4
Norfolk VA Beach Suffolk <sup>16</sup>	55,782	\$112.23	\$6.3
150 min North <sup>17</sup>	48,565	\$124.85	\$6.1
150 min North Carolina East <sup>18</sup>	40,076	\$106.19	\$4.3
150 min North Carolina Raleigh <sup>19</sup>	174,716	\$113.01	\$19.7
150 min Danville <sup>20</sup>	13,990	\$105.24	\$1.5
150 min West <sup>21</sup>	68,706	\$107.91	\$7.4
Washington DC <sup>22</sup>	18,748	\$122.64	\$2.3
DC Suburbs VA <sup>23</sup>	66,136	\$126.18	\$8.3
Outer DC Maryland <sup>24</sup>	61,817	\$120.25	\$7.4
<b>Total:</b>	<b>2,248,502</b>	<b>\$120.45</b>	<b>\$270.8</b>

Source: CSG analysis

If the Dumfries facility is moved within the town to a site with an HHR resort concept (and substantially more devices), the projected Richmond casino demand from the regional market would fall to \$262.6 million in gaming revenues from 2.19 million gamer visits. See note above in Downtown market potential regarding potential impact of an Emporia HHR facility.

As noted above, in our base model, Rosie's Richmond is estimated to generate \$64.4 million annually from the regional market. As a result of regional gaming expansion (all new facilities, not just a South Richmond resort casino), the projected Rosie's Richmond revenues would fall to \$45.7 million. If the Dumfries facility is resort-scale, the revenues would fall to \$44.4 million.

### LOCATION 3: NORTHWEST RICHMOND

In the case of a potential resort casino in the Northwest Richmond area, our presumption is that it would be in the general vicinity of Scott's Addition.

From a regional gaming market perspective, our predictive gravity model concludes a gaming revenue potential of \$276.7 million from the regional market, not including incremental value of regional patrons

staying overnight at the resort casino, assuming the Dumfries facility remains a small venue. This demand is projected to result from 2.26 million annual gamer visits. The Richmond Downtown and Northwest Glen Allen market areas collectively account for approximately 36% of the projected regional gamer visitation and 34% of the projected regional gamer casino win, and collectively the four Richmond market areas would account for approximately 45.5% of the patronage and 42% of the casino win. As with the alternative sites, we note that these percentages all get diluted as tourists and hotel guests are added to the totals.

**TABLE 15: POTENTIAL REGIONAL MARKET GAMING PATRONAGE AND REVENUES, NORTHWEST RICHMOND SITE**

MARKET AREA	GAMER VISITS	WIN PER VISIT	GAMING REVENUE (MMS)
Richmond Downtown Core <sup>1</sup>	361,402	\$108.63	\$39.3
South Richmond <sup>2</sup>	94,995	\$106.23	\$10.1
Northwest Glen Allen <sup>3</sup>	457,122	\$117.77	\$53.8
West Richmond <sup>4</sup>	117,246	\$111.83	\$13.1
30 min North <sup>5</sup>	156,764	\$116.73	\$18.3
Midlothian <sup>6</sup>	25,666	\$118.29	\$3.0
Montrose Airport <sup>7</sup>	53,749	\$109.16	\$5.9
30 to 60 min North <sup>8</sup>	42,526	\$113.30	\$4.8
45 min South <sup>9</sup>	75,691	\$109.17	\$8.3
90 min Charlottesville <sup>10</sup>	48,141	\$112.95	\$5.4
90 min NorthEast <sup>11</sup>	154,374	\$116.52	\$18.0
90 min South <sup>12</sup>	23,979	\$105.73	\$2.5
90 min SouthEast <sup>13</sup>	80,630	\$110.72	\$8.9
30 min South <sup>14</sup>	175,772	\$116.07	\$20.4
Harrisonburg Culpeper <sup>15</sup>	26,253	\$108.61	\$2.9
Norfolk VA Beach Suffolk <sup>16</sup>	50,777	\$112.23	\$5.7
150 min North <sup>17</sup>	54,313	\$124.85	\$6.8
150 min North Carolina East <sup>18</sup>	33,183	\$106.19	\$3.5
150 min North Carolina Raleigh <sup>19</sup>	147,298	\$113.01	\$16.6
150 min Danville <sup>20</sup>	12,922	\$105.24	\$1.4
150 min West <sup>21</sup>	72,196	\$107.91	\$7.8
Washington DC <sup>22</sup>	21,395	\$122.64	\$2.6
DC Suburbs VA <sup>23</sup>	72,717	\$126.18	\$9.2
Outer DC Maryland <sup>24</sup>	69,518	\$120.25	\$8.4
<b>Total:</b>	<b>2,264,998</b>	<b>\$122.16</b>	<b>\$276.7</b>

Source: CSG analysis

If the Dumfries facility is moved within the town to a site with an HHR resort concept (and substantially more devices), the projected Richmond casino demand from the regional market would fall to \$269.0 million in gaming revenues from 2.21 million gamer visits. See note above in Downtown market potential regarding potential impact of an Emporia HHR facility.

As noted above, in our base model, Rosie's Richmond is estimated to generate \$64.4 million annually from the regional market. As a result of regional gaming expansion (all new facilities, not just a Northwest Richmond resort casino), the projected Rosie's Richmond revenues would fall to \$41.1 million. If the Dumfries facility is resort-scale, the revenues would fall to \$40.3 million.

## REGIONAL TOURISM

Tourism is expected to be a significant contributor to the success of a resort casino in Richmond, providing an additional entertainment option to the region's estimated 7.7 million visitors per year.<sup>19</sup> The location of the potential resort casino will have an impact on the capture of tourists to it, as casino locations near existing tourism infrastructure and hotels are likely to draw more tourist visits than those located in less tourist-friendly areas.

## COMPARABLE RESEARCH

While comparative data on the share of tourists that visit casinos in the U.S. is not abundant and not often up-to-date, herein we present recent relevant data for comparison to Richmond. Pennsylvania has reported that the main purpose of between 3% and 4% of the state's adult overnight trips, and 4% of the state's adult day-trips were for casino gaming. These figures, it should be noted, do not include tourists who simply include a visit to a casino as part of their overall trip. Of all visitors to PA, 9% visited a casino or racetrack in 2017. While visiting a casino did not rank in the top 15 activities for visitors to PA aged 18-34 years old, it ranked highly among older age groups. Approximately 17% of middle-age and older travelers (both 35-54 and 55+ age cohorts) who visited PA without children included a casino visit during their stay.<sup>20</sup> Should only locales with casinos have been included in the study, these casino visitation rates would certainly have been higher.

Baton Rouge, Louisiana is a market very similar to Richmond in terms of demographics, income levels, and status as a state capital. Unlike Richmond, Baton Rouge has a long-standing relationship with casino gaming as it is home to three casinos (two in the downtown area dating back as far as 1993, and one in the southern suburbs opened in 2012). According to the 2018 Baton Rouge Overnight Visitor Report prepared for West Baton Rouge CVB & Visit Baton Rouge in 2019, 6% of all overnight person trips to Baton Rouge listed "casino" as their main purpose of trip, and 16% of overnight person-trips visited a casino during their stay.<sup>21</sup> For reference, the same study reported 11.3 million person-trips to Baton Rouge in 2018, of which 4.1 million were overnight visits, of which 3.3 million were adults.

New Orleans, a major tourist destination for leisure travel and host to one well-established casino (centrally located in Downtown, adjacent to the historic French Quarter), draws approximately 23.9% of tourists into its Harrah's casino.<sup>22</sup> On a state-wide basis, and largely impacted by the proliferation of casinos and their adjacency to state borders, 17% of all visitors to Louisiana participated in casino gambling during their trip.<sup>23</sup>

The most recent Leisure Visitor Profile for the State of Illinois reports that 3% of all visitors to this state with ten casinos (yet none located in its largest destination, Chicago) participate in casino gambling.<sup>24</sup>

## PROJECTED TOURISM CAPTURE AND REVENUES

In consideration of the unique market dynamics of Richmond and its visitor patterns, we have estimated that 8% of all adult overnight visitors could include a casino visit during their stay. In our

---

<sup>19</sup> Richmond Region Tourism, FY 2019-2020 Annual Report

<sup>20</sup> Pennsylvania Annual Travel Profile: 2017 and 2015 Travel Years, Commonwealth of Pennsylvania Department of Community and Economic Development.

<sup>21</sup> 2018 Baton Rouge Overnight Visitor Report Travel USA, Prepared for West Baton Rouge CVB & Visit Baton Rouge, Longwoods International, July 2019.

<sup>22</sup> 2015 New Orleans Area Visitor Profile Annual Report, prepared for New Orleans Convention and Visitors Bureau and New Orleans Tourism Marketing Corporation, University of New Orleans Hospitality Research Center, March 2016.

<sup>23</sup> Year-End 2017 Visitor Profile. An Inside Look at the Louisiana Travel Market, D.K. Shifflet & Associates, August 2018.

<sup>24</sup> 2016 Leisure Visitor Profile for the State of Illinois and the City of Chicago, D.K. Shifflet & Associates, June 2016.



base model calibration, we estimate that the two Rosie's HHR facilities in the market currently draw a small share of the region's tourists, and should continue to do so. In the case that the resort casino is located in Downtown Richmond, we forecast that 85% of those will visit it, versus 10% to Rosie's Richmond and 5% to Rosie's Colonial Downs. From these 254,726 projected tourist visits, we forecast an average win per visit of \$100, resulting in \$25.5 million in gross gaming revenues. In the case wherein the resort casino is located in the Northwest or South Richmond areas of the city, we estimate a slightly lower capture of tourists due to the relative supply of hotels and tourism infrastructure in those areas. *Table 16* details these projections by resort casino location.

**TABLE 16: POTENTIAL TOURISM INCREMENTAL BY LOCATION**

	DOWNTOWN	SOUTH	NORTHWEST
Richmond Region Annual Visitors	7,700,000	7,700,000	7,700,000
Adult Overnight Trips	3,745,966	3,745,966	3,745,966
Est. Capture Rate	8%	8%	8%
Tourist Gaming Visits	299,677	299,677	299,677
Richmond Casino Share of Visits	85%	75%	78%
Richmond Casino Visits	254,726	224,758	233,748
Win/Visit	\$100	\$100	\$100
<b>GGR</b>	<b>\$25,472,569</b>	<b>\$22,475,796</b>	<b>\$23,374,828</b>

Source: FY 2019-2020 Annual Report, Richmond Region Tourism; Richmond 2019 and 2020 Arrivallist study; CSG analysis

## HOTEL INCREMENTAL

As our model extends out to a 2.5-hour drive time, it is reasonable to assume that some gamers will want to stay overnight at the resort casino hotel, with that percentage increasing as the distance from Richmond increases. CSG has created resort casino-hotel demand models that are based on proprietary data that we have seen from regional casino hotels and take into consideration where in Richmond the resort casino may be relative to other hotel options. The following section provides estimates of the incremental gaming demand from hotel patrons, as well as projected hotel supply metrics and needs, but location.

### DOWNTOWN RICHMOND RESORT CASINO HOTEL DEMAND

If the casino resort is to be developed in Downtown Richmond, we project that 5.3% of casino patrons will opt to stay overnight, generate 78,415 room nights of demand (assuming 1.7 gamers per room), and will generate an incremental gaming win of \$13.2 million, based on an estimated incremental win per visit of \$99. As a result, the win per room occupied by gamers would be \$364.

**TABLE 17: POTENTIAL HOTEL GUEST INCREMENTAL, DOWNTOWN RICHMOND SITE**

MARKET AREA	DAY-TRIP VISITS	CONVERSION TO OVERNIGHT	OVERNIGHT VISITS	INCREMENTAL WIN/VISIT	INCREMENTAL WIN	RND
Richmond Downtown Core1	402,067	0.2%	804	\$92.96	\$74,756	473
South Richmond2	138,578	0.3%	346	\$90.85	\$31,474	204
Northwest Glen Allen3	398,768	0.3%	997	\$101.04	\$100,725	586
West Richmond4	111,959	0.3%	280	\$95.79	\$26,812	165
30 min North5	158,765	1.0%	1,588	\$100.12	\$158,951	934
Midlothian6	24,326	1.0%	243	\$101.49	\$24,689	143
Montrose Airport7	84,279	1.0%	843	\$93.44	\$78,747	496
30 to 60 min North8	40,207	4.0%	1,608	\$97.09	\$156,140	946
45 min South9	97,146	4.0%	3,886	\$93.45	\$363,116	2,286
90 min Charlottesville10	46,342	7.5%	3,476	\$96.78	\$336,359	2,044
90 min NorthEast11	148,206	7.5%	11,115	\$99.93	\$1,110,771	6,538
90 min South12	25,482	7.5%	1,911	\$90.40	\$172,769	1,124
90 min SouthEast13	93,631	7.5%	7,022	\$94.81	\$665,794	4,131
30 min South14	181,674	1.0%	1,817	\$99.53	\$180,819	1,069
Harrisonburg Culpeper15	25,337	7.5%	1,900	\$92.95	\$176,633	1,118
Norfolk VA Beach Suffolk16	55,203	10.0%	5,520	\$96.14	\$530,732	3,247
150 min North17	52,530	17.5%	9,193	\$107.28	\$986,214	5,407
150 min North Carolina East18	35,702	17.5%	6,248	\$90.81	\$567,393	3,675
150 min North Carolina Raleigh19	156,378	17.5%	27,366	\$96.83	\$2,649,788	16,098
150 min Danville20	12,791	17.5%	2,238	\$89.97	\$201,390	1,317
150 min West21	69,852	17.5%	12,224	\$92.33	\$1,128,617	7,191
Washington DC22	20,656	25.0%	5,164	\$105.33	\$543,930	3,038
DC Suburbs VA23	70,368	20.0%	14,074	\$108.45	\$1,526,304	8,279
Outer DC Maryland24	67,212	20.0%	13,442	\$103.22	\$1,387,578	7,907
<b>TOTAL</b>	<b>2,517,458</b>	<b>5.3%</b>	<b>133,306</b>	<b>\$98.87</b>	<b>\$13,180,502</b>	<b>78,415</b>

Source: CSG analysis

The hotel demand model changes slightly if the Dumfries HHR facility shifts to a resort. In that scenario, a total of 126,829 gamers would stay overnight, generating 74,605 room nights of demand and generate \$12.5 million in incremental gross gaming revenues.

There may be some incremental hotel demand, and ultimately some casino demand, if the primary purpose of visitation to the hotel is to visit downtown, as may be the case for convention center visitors, if the hotel is sized sufficiently to accommodate large groups. Visitors not coming for the primary purpose of gaming would not have the same propensity to game, or gaming budgets as large as those coming for the primary purpose of gaming, but their demand would have an impact on both gaming revenues and room revenues (as well as taxes related to both).

We assume that if a resort casino hotel is developed in the downtown market that it would allot 150 rooms for non-primary gamers, incremental to what would be needed solely to accommodate those coming for the primary purpose of gaming. Assuming the incremental 150 rooms attain an 80% occupancy rate, with 1.4 persons per room and 50% of those being gamers, at an average win per visitor of \$120, the incremental gaming win would be \$3.7 million.

In total, we therefore estimate that the gaming win attributable to a hotel at a downtown resort casino would be \$16.9 million. A property may be optimally sized at 400 rooms, which would entail attaining an 83.7% occupancy rate based on these projections. A full-scale facility in Dumfries would lower the incremental revenue projection to \$16.2 million, lowering the occupancy rate forecast to 81.1%.

## SOUTH RICHMOND RESORT CASINO HOTEL DEMAND

If the resort casino is to be developed in South Richmond, a slightly higher percentage of gamers would opt to stay overnight than we assumed for the Downtown site, as there would likely be fewer options for visitors to stay at a proximate property instead. This primarily applies to assumed overnight capture rates for those in the outer market areas. As a result, we project that 6.2% of casino patrons will opt to stay overnight, generate 87,518 room nights of demand (assuming 1.7 gamers per room), and will generate an incremental gaming win of \$14.7 million, based on an estimated incremental win per visit of \$99. As a result, the win per room occupied by gamers would be \$364.

**TABLE 18: POTENTIAL HOTEL GUEST INCREMENTAL, SOUTH RICHMOND SITE**

MARKET AREA	DAY-TRIP VISITS	CONVERSION TO OVERNIGHT	OVERNIGHT VISITS	INCREMENTAL WIN/VISIT	INCREMENTAL WIN	RND
Richmond Downtown Core <sup>1</sup>	321,843	0.2%	644	\$92.96	\$59,840	379
South Richmond <sup>2</sup>	208,516	0.3%	521	\$90.85	\$47,358	307
Northwest Glen Allen <sup>3</sup>	296,311	0.3%	741	\$101.04	\$74,846	436
West Richmond <sup>4</sup>	96,632	0.3%	242	\$95.79	\$23,141	142
30 min North <sup>5</sup>	108,568	1.0%	1,086	\$100.12	\$108,696	639
Midlothian <sup>6</sup>	23,671	1.0%	237	\$101.49	\$24,025	139
Montrose Airport <sup>7</sup>	72,186	1.0%	722	\$93.44	\$67,448	425
30 to 60 min North <sup>8</sup>	32,270	4.3%	1,371	\$97.09	\$133,149	807
45 min South <sup>9</sup>	133,489	4.3%	5,673	\$93.45	\$530,148	3,337
90 min Charlottesville <sup>10</sup>	41,239	8.0%	3,299	\$96.78	\$319,278	1,941
90 min NorthEast <sup>11</sup>	125,780	8.0%	10,062	\$99.93	\$1,005,544	5,919
90 min South <sup>12</sup>	30,194	8.0%	2,416	\$90.40	\$218,372	1,421
90 min SouthEast <sup>13</sup>	94,384	8.0%	7,551	\$94.81	\$715,889	4,442
30 min South <sup>14</sup>	239,514	1.0%	2,395	\$99.53	\$238,387	1,409
Harrisonburg Culpeper <sup>15</sup>	22,069	8.0%	1,765	\$92.95	\$164,105	1,039
Norfolk VA Beach Suffolk <sup>16</sup>	55,782	12.0%	6,694	\$96.14	\$643,554	3,938
150 min North <sup>17</sup>	48,565	19.0%	9,227	\$107.28	\$989,936	5,428
150 min North Carolina East <sup>18</sup>	40,076	19.0%	7,614	\$90.81	\$691,500	4,479
150 min North Carolina Raleigh <sup>19</sup>	174,716	19.0%	33,196	\$96.83	\$3,214,283	19,527
150 min Danville <sup>20</sup>	13,990	19.0%	2,658	\$89.97	\$239,153	1,564
150 min West <sup>21</sup>	68,706	19.0%	13,054	\$92.33	\$1,205,260	7,679
Washington DC <sup>22</sup>	18,748	30.0%	5,624	\$105.33	\$592,397	3,308
DC Suburbs VA <sup>23</sup>	66,136	25.0%	16,534	\$108.45	\$1,793,154	9,726
Outer DC Maryland <sup>24</sup>	61,817	25.0%	15,454	\$103.22	\$1,595,239	9,091
<b>TOTAL</b>	<b>2,395,203</b>	<b>6.2%</b>	<b>148,781</b>	<b>\$98.77</b>	<b>\$14,694,700</b>	<b>87,518</b>

Source: CSG analysis

The hotel demand model changes slightly if the Dumfries HHR facility shifts to a resort. In that scenario, a total of 141,564 gamers would stay overnight, generating 83,273 room nights of demand and generate \$13.9 million in incremental gross gaming revenues.

While there may be some incremental hotel demand from those who are not coming for the primary purpose of casino visitation, it would likely have less appeal than a downtown location. As with our previous assumption, visitors not coming for the primary purpose of gaming would not have the same propensity to game, or gaming budgets as large as those coming for the primary purpose of gaming, but their demand would have an impact on both gaming revenues and room revenues (as well as taxes related to both).

We assume that if a resort casino hotel is developed in South Richmond that it would have 50 rooms incremental to what would be needed solely to accommodate gamers. Assuming the incremental 50 rooms attain an 80% occupancy rate, with 1.4 persons per room and 50% of those being gamers, at an average win per visitor of \$120, the incremental gaming win would be \$1.2 million.

In total, we therefore estimate that the gaming win attributable to a hotel at a South Richmond resort casino would be \$15.9 million. A property may be optimally sized at 325 rooms, which would entail attaining an 86.1% occupancy rate based on these projections. A full-scale facility in Dumfries would lower the incremental revenue projection to \$15.2 million, lowering the occupancy rate forecast to 82.5%.

#### NORTHWEST RICHMOND RESORT CASINO HOTEL DEMAND

A resort casino hotel in Northwest Richmond is assumed to have similar demand dynamics as was assumed for South Richmond. Based on the projected source of gaming demand, we project that 6.1% of casino patrons will opt to stay overnight, generate 86,508 room nights of demand (assuming 1.7 gamers per room), and will generate an incremental gaming win of \$14.6 million, based on an estimated incremental win per visit of \$99. As a result, the win per room occupied by gamers would be \$366.

**TABLE 19: POTENTIAL HOTEL GUEST INCREMENTAL, NORTHWEST RICHMOND SITE**

MARKET AREA	DAY-TRIP VISITS	CONVERSION TO OVERNIGHT	OVERNIGHT VISITS	INCREMENTAL WIN/VISIT	INCREMENTAL WIN	RND
Richmond Downtown Core <sup>1</sup>	361,402	0.2%	723	\$92.96	\$67,195	425
South Richmond <sup>2</sup>	94,995	0.3%	237	\$90.85	\$21,575	140
Northwest Glen Allen <sup>3</sup>	457,122	0.3%	1,143	\$101.04	\$115,465	672
West Richmond <sup>4</sup>	117,246	0.3%	293	\$95.79	\$28,078	172
30 min North <sup>5</sup>	156,764	1.0%	1,568	\$100.12	\$156,947	922
Midlothian <sup>6</sup>	25,666	1.0%	257	\$101.49	\$26,049	151
Montrose Airport <sup>7</sup>	53,749	1.0%	537	\$93.44	\$50,221	316
30 to 60 min North <sup>8</sup>	42,526	4.3%	1,807	\$97.09	\$175,467	1,063
45 min South <sup>9</sup>	75,691	4.3%	3,217	\$93.45	\$300,602	1,892
90 min Charlottesville <sup>10</sup>	48,141	8.0%	3,851	\$96.78	\$372,715	2,265
90 min NorthEast <sup>11</sup>	154,374	8.0%	12,350	\$99.93	\$1,234,135	7,265
90 min South <sup>12</sup>	23,979	8.0%	1,918	\$90.40	\$173,419	1,128
90 min SouthEast <sup>13</sup>	80,630	8.0%	6,450	\$94.81	\$611,564	3,794
30 min South <sup>14</sup>	175,772	1.0%	1,758	\$99.53	\$174,945	1,034
Harrisonburg Culpeper <sup>15</sup>	26,253	8.0%	2,100	\$92.95	\$195,220	1,235
Norfolk VA Beach Suffolk <sup>16</sup>	50,777	12.0%	6,093	\$96.14	\$585,810	3,584
150 min North <sup>17</sup>	54,313	19.0%	10,320	\$107.28	\$1,107,102	6,070
150 min North Carolina East <sup>18</sup>	33,183	19.0%	6,305	\$90.81	\$572,561	3,709
150 min North Carolina Raleigh <sup>19</sup>	147,298	19.0%	27,987	\$96.83	\$2,709,864	16,463
150 min Danville <sup>20</sup>	12,922	19.0%	2,455	\$89.97	\$220,888	1,444
150 min West <sup>21</sup>	72,196	19.0%	13,717	\$92.33	\$1,266,481	8,069
Washington DC <sup>22</sup>	21,395	30.0%	6,419	\$105.33	\$676,062	3,776
DC Suburbs VA <sup>23</sup>	72,717	25.0%	18,179	\$108.45	\$1,971,576	10,694
Outer DC Maryland <sup>24</sup>	69,518	25.0%	17,379	\$103.22	\$1,793,966	10,223
<b>TOTAL</b>	<b>2,428,628</b>	<b>6.1%</b>	<b>147,064</b>	<b>\$99.33</b>	<b>\$14,607,911</b>	<b>86,508</b>

Source: CSG analysis

The hotel demand model changes slightly if the Dumfries HHR facility shifts to a resort. In that scenario, a total of 139,942 gamers would stay overnight, generating 82,319 room nights of demand and generate \$13.9 million in incremental gross gaming revenues.

We assume that if a resort casino hotel is developed in Northwest Richmond that it would have 50 rooms incremental to what would be needed solely to accommodate gamers, consistent with the South Richmond site assumption. Assuming the incremental 50 rooms attain an 80% occupancy rate, with 1.4 persons per room and 50% of those being gamers, at an average win per visitor of \$120, the incremental gaming win would be \$1.2 million.

In total, we therefore estimate that the gaming win attributable to a hotel at a Northwest Richmond resort casino would be \$15.8 million. A property may be optimally sized at 325 rooms, which would entail attaining an 85.2% occupancy rate based on these projections. A full-scale facility in Dumfries would lower the incremental revenue projection to \$15.1 million, lowering the occupancy rate forecast to 81.7%.



**TABLE 20: POTENTIAL HOTEL PERFORMANCE, FIRST STABILIZED YEAR OF OPERATION**

W/DUMFRIES SMALL HHR				W/DUMFRIES RESORT HHR		
	Downtown	South	Northwest	Downtown	South	Northwest
Rooms	400	325	325	400	325	325
RNA	146,000	118,625	118,625	146,000	118,625	118,625
RND	122,215	102,118	101,108	118,405	97,873	96,919
Occupancy	83.7%	86.1%	85.2%	81.1%	82.5%	81.7%

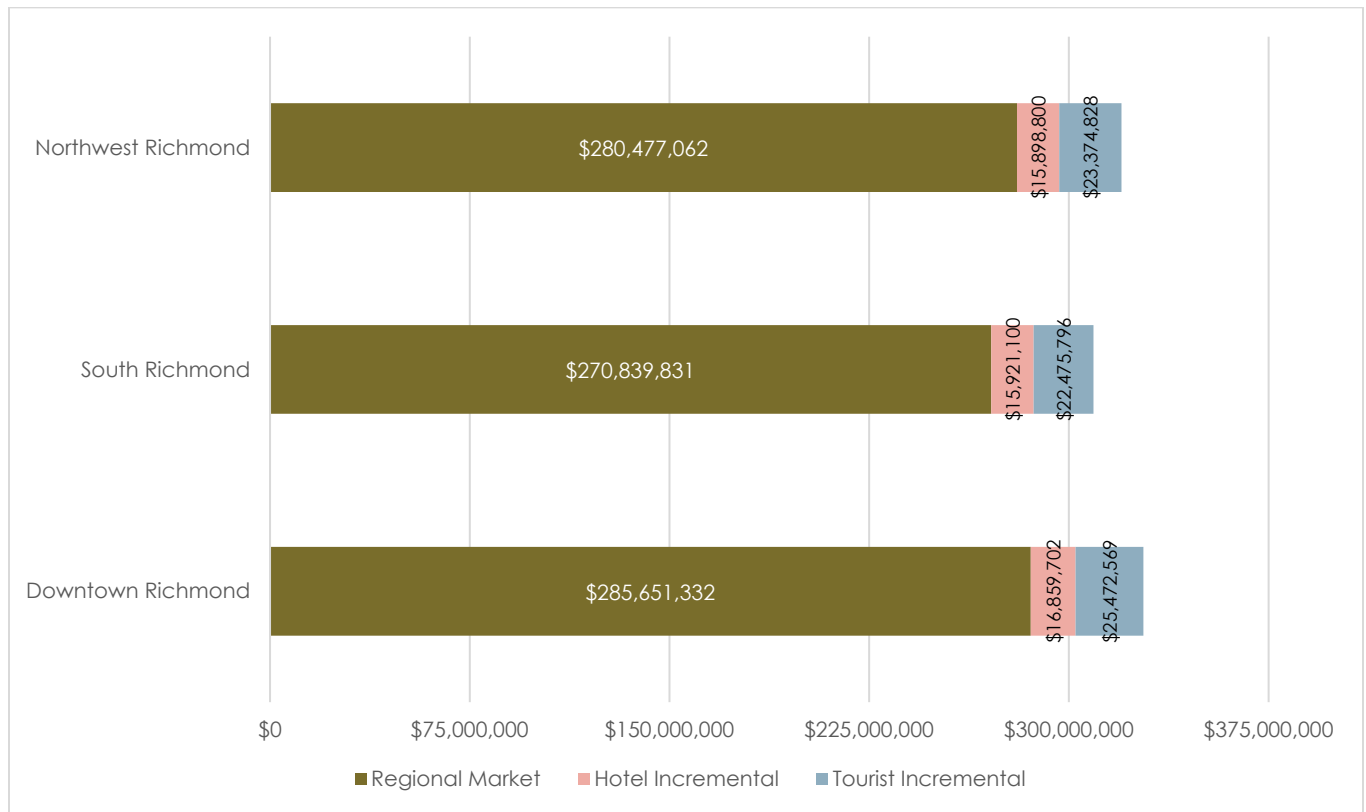
Source: CSG analysis

## SUMMARY OF RESORT CASINO GAMING POTENTIAL

Total gaming revenues for each of the considered alternative sites in Richmond are presented in Table 21.<sup>25</sup> We note that these totals do not include revenues that may be generated through sports betting, as it is not subject to gaming tax at the local level, and the growth trajectory may be much different than for casino gaming due to the degree of development of an online presence. Bricks and mortar sports betting could be expected to add approximately 3% to GGR. Gaming revenues as presented in this report are also net of promotional free play, as it is not a taxable event.<sup>26</sup>

<sup>25</sup> These projections assume the HHR facility in Emporia is not developed. As discussed in the regional market assessment, an HHR facility at that location potentially could divert \$2 to \$3 million from a Richmond resort casino. The higher end of that range may apply most to a South Richmond location due to its otherwise greater ability to draw from North Carolina markets, but the difference relative to a Northwest Richmond location would not be substantial.

<sup>26</sup> The non-taxation of free play was confirmed by Gina Smith, Deputy Director of Casino Compliance, Virginia Lottery, via email correspondence March 2, 2021.

**CHART 1: GROSS GAMING REVENUE POTENTIAL BY LOCATION (WITH DUMFRIES SMALL HHR)**


Source: CSG projections

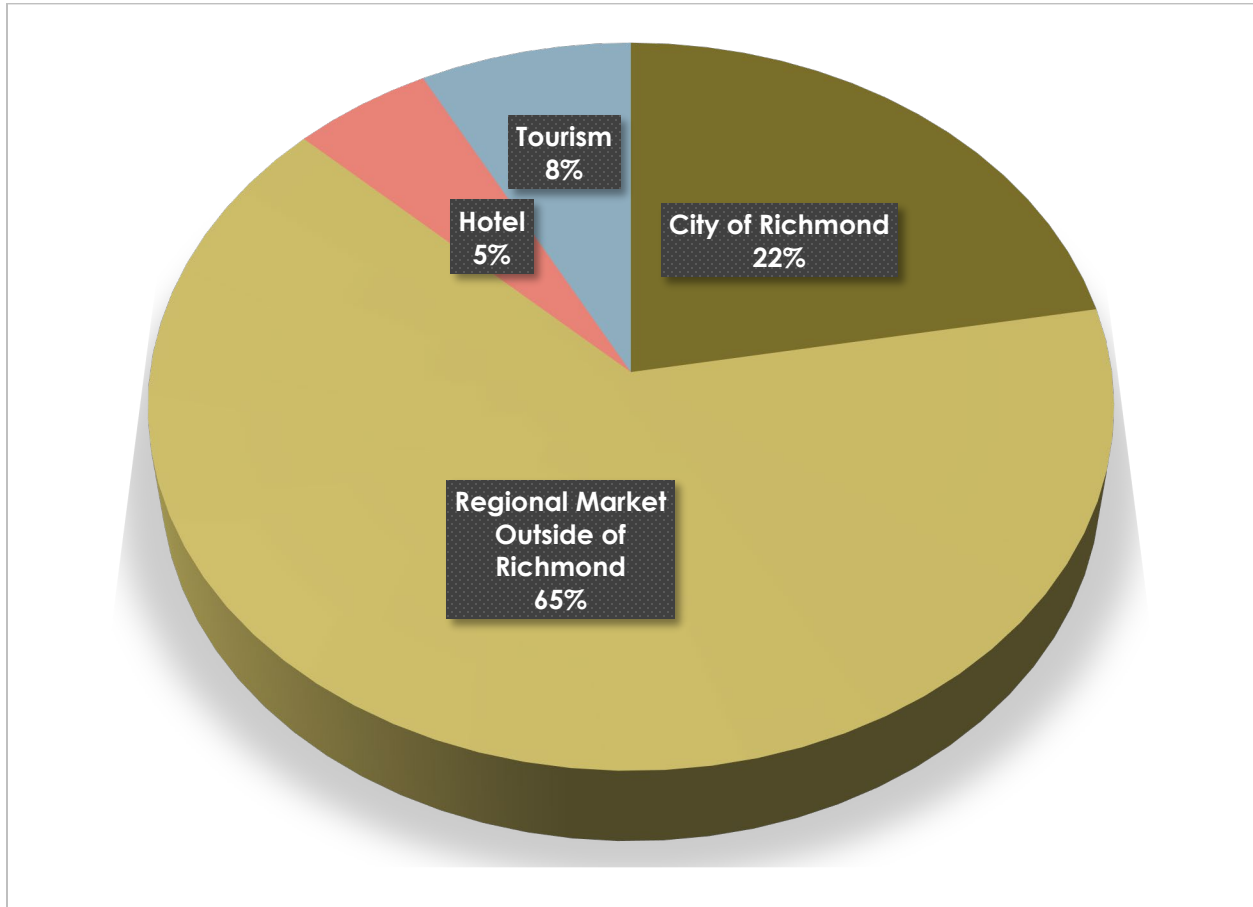
**TABLE 21: SUMMARY OF GROSS GAMING REVENUE POTENTIAL**

MARKET SEGMENT	DOWNTOWN RICHMOND		SOUTH RICHMOND		NORTHWEST RICHMOND	
	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort
Regional Market	\$285,651,332	\$277,520,388	\$270,839,831	\$262,581,230	\$280,477,062	\$268,982,498
Hotel Incremental	\$16,859,702	\$16,185,516	\$15,921,100	\$15,168,891	\$15,898,800	\$15,089,485
Tourist Incremental	\$25,472,569	\$25,472,569	\$22,475,796	\$22,475,796	\$23,374,828	\$23,374,828
<b>Total GGR</b>	<b>\$327,983,603</b>	<b>\$319,178,473</b>	<b>\$309,236,726</b>	<b>\$300,225,917</b>	<b>\$319,750,690</b>	<b>\$307,446,810</b>

Source: CSG projections

Of particular relevance to the City of Richmond is the share of gaming revenues that are expected to be generated by its residents versus those living outside of the city. In the case of the Downtown Richmond site, the resort casino is projected to generate approximately 22% of its gross gaming revenues, or \$72.7 million, from Richmond residents' day-trip visits (approximately \$233,000 of the \$16.9 million hotel-associated GGR is projected from Richmond residents, resulting in approximately \$72.9 million total GGR from Richmonders). *Table 22* details the sources of GGR in our forecast. It should be noted that the different sites vary only minimally in terms of proportion of revenues by source.

**CHART 2: GROSS GAMING REVENUE POTENTIAL BY SOURCE, DOWNTOWN RICHMOND SITE**



Source: CSG projections

**TABLE 22: GROSS GAMING REVENUE POTENTIAL BY SOURCE, DOWNTOWN RICHMOND SITE**

SOURCE	GGR	SHARE OF GGR
City of Richmond Residents	\$72,696,641	22.2%
Regional Market Outside of Richmond	\$212,954,691	64.9%
Hotel	\$16,859,702	5.1%
Tourism	\$25,472,569	7.8%
TOTAL	\$327,983,603	100.0%

Source: CSG projections

## SCALE AND PERFORMANCE METRICS

The following table translates our projections of visitation and gaming win into assumptions regarding optimal scale and resulting key performance metrics of the casino. Particularly, two metrics that we focus on are the win per unit per day, which is the ratio of daily gaming win by the number of gaming seats in a casino (with 6 being the number of seats assigned as an average per gaming table), as well as the metric of ‘turns per day’, which is the ratio of the number of gaming patrons per day to the number of seats. Optimal sizing of a casino in terms of turns per day can be skewed if a facility is exceptionally dependent on weekend or evening visitation, though that is generally not the case for casinos that focus on a local/regional market. In our analysis below, we estimate that a casino with between 1,870 and 2,000 electronic gaming devices (slots or electronic table game seats) and 80 to 90 table games (2,350 to 2,540 positions) may be optimal to accommodate demand. A facility sized in this range (varying depending on Richmond location and Dumfries scale) has the potential to average 3.0 turns per day and generate a win per gaming position of approximately \$350.

An alternative, smaller scale at approximately 85% of the above assumptions may be reasonably effective in the initial years of operation, as casinos generally do not achieve projected demand until operations stabilize, generally assumed to occur by year 3. Even if the facility does achieve projections, it would equate to a win per position per day of approximately \$400, and turns per day of 3.45, neither of which would be red flags of concern.

**TABLE 23: CASINO PERFORMANCE MEASURES, FIRST STABILIZED YEAR OF OPERATIONS**

	DOWNTOWN RICHMOND		SOUTH RICHMOND		NORTHWEST RICHMOND	
	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort
Gaming Revenue (\$M)	\$328.0	\$319.2	\$309.2	\$300.2	\$319.8	\$307.4
Visitation (M)	2.80	2.73	2.63	2.56	2.71	2.61
Win per Visit	\$117	\$117	\$118	\$117	\$118	\$118
Number of Gaming Positions	2,540	2,490	2,410	2,350	2,490	2,400
Win/Position/Day	\$354	\$351	\$352	\$350	\$352	\$351
Turns/Position/Day	3.0	3.0	3.0	3.0	3.0	3.0

Source: CSG projections. Positions = the number of slots plus 6 positions per table game.

## FISCAL AND EMPLOYMENT IMPACT

The addition of a resort casino to Richmond will create fiscal benefits for the city, as well as create a source of new employment. Through City negotiations with an operator it may be possible to attain higher than average wage rates for resort casino employees, as well as ascertain hiring targets for city residents or segments of the population. In our fiscal and employment analysis below we address only the direct impacts – taxes generated by the facility and employment at the facility. We recognize that incremental fiscal impacts and employment impacts will be felt through the multiplier process, with rising revenues for vendors supporting employment growth, and resort casino employees having greater spending power within the local economy, but the scope of this analysis did not include undertaking those calculations.

### TAX IMPACTS

#### CASINO GAMING TAXES

Gaming taxes collected by the State for distribution to the host city are at a marginal rates of 6% for the first \$200 million in Adjusted Gross Receipts (“AGR”), a marginal tax rate of 7% for AGR in the range of \$200 million to \$400 million and a marginal tax rate of 8% for AGR above \$400 million, where AGR is defined as the total amount of money exchanged for the purpose of chips, tokens, or electronic cards by casino gaming patrons less winnings paid to winners. This is synonymous with the gross gaming revenue projections provided in this report, and notably does not apply tax to promotional free play.

As such, for gaming revenues in the range of \$300 million to \$328 million (as is projected in our modeling for Richmond, as demonstrated in Table 21 and Table 23), an effective tax rate paid to the local government would be 6.35% to 6.4%, resulting in \$19.5 million to \$21.0 million in taxes generated for the City. The marginal tax rates on gaming win for the casinos in Virginia are at a rate of 18% for the first \$200 million in AGR, 23% for \$200 million to \$400 million in AGR and 30% for AGR above \$400 million. As such, the casino is projected to be paying a total gaming tax of \$59 million to \$65 million, or approximately 20% of AGR. In summary, the host city will receive nearly one-third of gaming tax revenues paid by the casino.

**TABLE 24: SUMMARY OF GAMING TAX REVENUE POTENTIAL**

	DOWNTOWN RICHMOND		SOUTH RICHMOND		NORTHWEST RICHMOND	
	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort
<b>Total Gaming Tax</b>						
First \$200m @ 18%	\$36,000,000	\$36,000,000	\$36,000,000	\$36,000,000	\$36,000,000	\$36,000,000
Incremental @ 23%	\$29,436,229	\$27,411,049	\$25,124,447	\$23,051,961	\$27,542,659	\$24,712,766
<b>Total</b>	<b>\$65,436,229</b>	<b>\$63,411,049</b>	<b>\$61,124,447</b>	<b>\$59,051,961</b>	<b>\$63,542,659</b>	<b>\$60,712,766</b>
<b>Effective</b>	<b>20.0%</b>	<b>19.9%</b>	<b>19.8%</b>	<b>19.7%</b>	<b>19.9%</b>	<b>19.7%</b>
<b>City share</b>						
First \$200m @ 6%	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000
Incremental @ 7%	\$8,958,852	\$8,342,493	\$7,646,571	\$7,015,814	\$8,382,548	\$7,521,277
<b>Total</b>	<b>\$20,958,852</b>	<b>\$20,342,493</b>	<b>\$19,646,571</b>	<b>\$19,015,814</b>	<b>\$20,382,548</b>	<b>\$19,521,277</b>
<b>Effective</b>	<b>6.4%</b>	<b>6.4%</b>	<b>6.4%</b>	<b>6.3%</b>	<b>6.4%</b>	<b>6.3%</b>

Source: CSG projections



These impacts need to be netted against the projected decline in gaming taxes as could be expected from Rosie's Richmond. In our models, the projected decline in gaming win at Rosie's ranges from approximately \$18 million to approximately \$26 million, depending on resort casino location and scale of the Dumfries HHR facility, reflecting a decline of 28.2% to 39.5%. Based on a local HHR tax collection of approximately 3% of HHR gaming win, this would reflect a decline in gaming tax in the range of \$0.55 million to \$0.79 million. We note that these impacts include those that are induced by *all* new casinos in Virginia, not just a Richmond resort casino.

## HOTEL TAXES

The vast majority of hotel rooms that will be occupied at a Richmond resort casino resort may be provided complimentary by the casino operator, with the notable exception of if a resort casino is to be located downtown, sized appropriately to capture and induce incremental downtown tourism.

The local lodging tax rate is 8%. In CSG's casino demand models we forecast the hotel room demand for each location considered, to include people with the primary purpose of visitation as casino, as well as a smaller segment for those that stay for some other primary purpose. It should be assumed that 80% of the hotel demand generated by primary gamers would be provided complimentary, while the demand for the remaining rooms would all be cash. For the purpose of this analysis we are assuming that all rooms will be taxable regardless of whether they are cash or comped, though the decision to tax the comped activities varies between jurisdictions in the U.S.

In the case of a resort casino sited in either South Richmond or Northwest Richmond, the projected total hotel room demand fell in the range of 96,919 to 102,118, depending on the scale of the HHR facility in Dumfries (the projection for South Richmond was only approximately 1% higher room demand than Northwest Richmond).

In the case of a resort casino sited in Downtown Richmond, the projected total hotel room demand fell in the range of 118,405 to 122,215, depending on the scale of the HHR facility in Dumfries, including an estimated 43,800 room nights for those coming for the primary purpose of something other than gaming (i.e., all cash-paying customers).

According to Smith Travel Research monthly reports for 2019, average daily room rates for the year for rooms classified as Luxury averaged \$152, and for Upscale classified rooms \$114. These averages fell as an average for 2020 by 12% to 13%, due to the impact of the pandemic. Prior to the pandemic (January/February 2020), rates for Upscale and Luxury hotels were up slightly over the same periods in 2019. If we assume a resort casino hotel categorically may fall in the middle of the range of Upscale to Luxury (\$133.50 in 2019 dollars), and apply a small inflation rate from 2022 to 2024 relative to 2019, a likely attainable average daily rate would be approximately \$142.

This yields the following projections of room accommodations and room taxes, ranging from \$1.1 million to \$1.4 million per year, depending on location.

**TABLE 25: POTENTIAL ANNUAL HOTEL ROOM TAX**

	DOWNTOWN RICHMOND		SOUTH RICHMOND		NORTHWEST RICHMOND	
	w/Dumfries small HHR	w/Dumfries Resort	w/Dumfries small HHR	w/Dumfries Resort	w/Dumfries small HHR	w/Dumfries Resort
Rooms Demanded	122,215	118,405	102,118	97,873	101,108	96,919
Room Rev. at \$142/night	\$17,354,530	\$16,813,510	\$14,500,756	\$13,897,966	\$14,357,336	\$13,762,498
<b>Tax Revenues at 8%</b>	<b>\$1,388,362</b>	<b>\$1,345,081</b>	<b>\$1,160,060</b>	<b>\$1,111,837</b>	<b>\$1,148,587</b>	<b>\$1,101,000</b>

Source: CSG projections

## F&B TAXES

Based on similar casino resorts in regional destinations in the U.S. (i.e., not Las Vegas), it should be expected that F&B revenues would equate to approximately 14% of casino gaming revenues. As a result, food and beverage revenues are projected to be approximately \$44 million annually,  $\pm$  \$2 million, depending on the volume of casino and hotel visitation.

Based on a meals tax rate of 7.5%, tax revenues are projected to be in the range of **\$3.2 million to \$3.4 million**.

**TABLE 26: POTENTIAL ANNUAL F&B TAX**

	DOWNTOWN RICHMOND		SOUTH RICHMOND		NORTHWEST RICHMOND	
	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort	with Dumfries small HHR	with Dumfries Resort
F&B Revenue	\$45,917,704	\$44,684,986	\$43,293,142	\$42,031,628	\$44,765,097	\$43,042,553
<b>Tax Revenues at 7.5%</b>	<b>\$3,443,828</b>	<b>\$3,351,374</b>	<b>\$3,246,986</b>	<b>\$3,152,372</b>	<b>\$3,357,382</b>	<b>\$3,228,192</b>

Source: CSG projections

## ANCILLARY AMENITY TAXES

Entertainment is taxed by the city at a rate of 7% for ticketed events greater than \$.50 cents a ticket. The scale of entertainment facility proposed, frequency of event and type of event will likely vary widely by proposal, if at all specifically forecast. A reasonable assumption may be for a 2,500-seat facility, 70% full, offering 78 events per year (1.5x/week) at an average ticket price of \$75. This would result in just over \$10 million in ticket revenues, and **approximately \$716,625 in tax revenues**.

## SALES TAXES (CITY SHARE)

The City's share of the sales tax on hotel rooms, F&B and other purchases is at a rate of 1%. Based on the above projections for hotel, F&B and ancillary amenities, City sales tax revenues are projected to be in the range of **\$680,000 to \$735,000**.

## PROPERTY TAXES

Real estate is taxed at a rate of \$1.20 per \$100 in assessed value. We do not know what dollar value the investments will be, but assuming a typical bid for the hard cost construction value is \$275 million (with additional costs for FF&E, financing, professional fees, etc.), potential real estate taxes will be **\$3.3 million**.

A special assessment fee is also imposed for developments in the downtown area, with most areas having a fee of \$0.05 per \$100 in assessed value. This translates to \$137,500 for the Downtown district project assuming the base is \$275 million in hard costs.

## ADDITIONAL TAXES

The City will also generate taxes based on business licenses, business personal property and utilities. Based on the food and beverage revenue projections, with a license fee of \$0.36 per \$100 in revenues, the business license cost would likely be in the range of \$151,000 to \$165,000.

Business personal property could be more substantial, taxed at a rate of \$3.70 per \$100 in value of furnishings and fixtures, initially at 70% of the value, but declining annually to 20% as the assets depreciate. A key issue here is the degree to which slots are purchased versus leased, which would provide for broad variance in terms of total furnishings and fixtures costs. We envision the tax revenue for the first five years (taxed at an average of 50% of value) would be in the range of \$0.9 million to \$1.4 million per year, assuming a value in the range of \$50 to \$75 million (using \$62.5 million as an average in our tables that follow, the average would be \$1.16 million). There is no reason to assume a different value for different locations, but the estimate for this tax should be more evident when RFP submissions are made.

The City currently generated approximately \$18 million per year in consumer utilities taxes. CSG cannot estimate the volume of natural gas that the resort casino will consume, but we presume that the impact of this tax will be negligible relative to these other forms of taxation (i.e., having less than a 1% impact on city-wide utility consumption). We presume this total will be comparable to that of the projected business license tax.

## TOTAL TAX IMPACTS

In total, the potential direct fiscal impact to the City of Richmond of annual resort casino operations is projected to be in the range of \$29.7 million to \$31.4 million. This does not include any agreements with resort casino operators regarding additional negotiated payments to the City and assumes promotional allowances are taxed. These totals also presume that the HHR facility in Dumfries will remain as is, rather than move and convert to a resort, or that a small HHR facility gets developed in Emporia. If the Dumfries move and transformation occurs, these aggregate totals may decline by \$0.73 million to \$1.0 million, for a range of \$28.9 million to \$30.7 million, while further narrowing the difference in the total between South and Northwest (South \$28.9 million, Northwest \$29.4 million). If a small HHR facility is developed in Emporia as proposed, the tax impact may be an additional \$0.2 million, with slight variance by potential Richmond casino location (impact being highest for a South Richmond casino, but effectively a 'rounding error' when considering the total fiscal impact of a Richmond casino).

**TABLE 27: ANNUAL TAX POTENTIAL SUMMARY (WITHOUT DUMFRIES RESORT)**

	DOWNTOWN	SOUTH	NORTHWEST
Gaming Taxes			
Casino	\$20,958,852	\$19,646,571	\$20,382,548
Net Rosie's decline	-\$752,352	-\$548,787	-\$686,439
Net Gaming	\$20,206,500	\$19,097,784	\$19,696,110
Hotel	\$1,388,362	\$1,160,060	\$1,148,587
F&B	\$3,443,828	\$3,246,986	\$3,357,382
Entertainment	\$716,625	\$716,625	\$716,625
City Sales Tax	\$735,097	\$680,314	\$693,599
Property	\$3,300,000	\$3,300,000	\$3,300,000
Business License	\$165,304	\$155,855	\$161,154
Personal Property (avg/yr first 5 years)	\$1,156,250	\$1,156,250	\$1,156,250
Utilities	\$165,304	\$155,855	\$161,154
Downtown District Special Assessment	\$137,500		
<b>Total</b>	<b>\$31,414,770</b>	<b>\$29,669,730</b>	<b>\$30,390,862</b>

Source: CSG projections

## LABOR MARKET IMPACTS

In the Economic and Demographic Overview section of this report we noted that the labor force in the city of Richmond totaled approximately 120,000, and nearly 700,000 for the Richmond MSA as a whole. The unemployment rate in the city of Richmond was 6.5% in December 2020, reflecting an unemployment level of 7,635, down from nearly 15,000 during Summer 2020, but up from a decade-low of 3,373 in December 2019. At the MSA level, the volume of unemployment since April 2020 has also varied widely on a month-to-month basis, from approximately 32,500 people to 65,000 people, in contrast to the range of approximately 17,500 to 23,900 for 2019. We presume that recovery may take several years for the labor markets, but that by the time the resort casino opens the unemployment levels in the city and MSA may be closer to the 2019 ranges.<sup>27</sup>

It should be reasonable to expect that casinos will make a concerted effort (or pledge) to have preferential hiring for city residents, and that the vast majority of the remainder of labor demand will be filled by residents of the Richmond MSA, with very small exceptions for skilled, senior management positions. Few employees should be expected to move to the city or MSA for the purpose of resort casino employment, such that there should be no impact on school needs either.

Based on our assumption of a resort casino with 1,870 to 2,000 electronic games, 80 to 90 gaming tables and a sports book, generating \$300 million to \$328 million in gaming revenues, labor costs are estimated to be in the range of \$52 million to \$56 million. Assuming an estimated average labor cost of \$45,000 per employee, the casino would employ approximately between 1,150 and 1,240 people, including administration, security, finance, marketing and related functions. The hotel is assumed to be

<sup>27</sup> U.S. Bureau of Labor Statistics. <https://www.bls.gov/lau/>, accessed March 1, 2021.

sized in the range of 325 to 400 rooms. Based on data for resort casino hotels in other regional gaming markets, a reasonable room count/employee count ratio to assume is approximately 3.5:1, which would result in a hotel employment range of approximately 95 to 115. In our fiscal analysis we estimate F&B revenues will be in the range of \$42 million to \$48 million, which should support employment in the range of 560 to 610 (based on a ratio of one job per \$75,000 in revenues). Ancillary amenities, such as entertainment and spa may add approximately 70 employees. In total, we project a resort casino **full-time equivalent employment range of approximately 1,875 to 2,035**. These totals potentially could be larger depending on the ancillary amenity mix, as the addition of concepts like a retail promenade have not been assumed here.

As such, assuming the city unemployment rate trends back down to the 2017 average by the time the casino opens (i.e., to a level of approximately 5,000), and there is preferential hiring for city residents, casino operations potentially could lower the unemployment rate by 1% or more. A more likely, or additional outcome may be that a sizable share of casino resort jobs will reflect a return to the labor force for those that have dropped out, as the 24/7 operation of a casino resort provides for ample opportunity for people (especially those that are unskilled) to re-enter.



## CSG SOCIOECONOMIC RESEARCH

In addition to the research presented in the body of this report, CSG has interviewed public safety officials and city economic development directors in comparable markets throughout the US to gain perspective on how gaming facilities have impacted communities; i.e., whether the gaming facilities created any issues with respect to public safety staffing needs, the volume of calls to the casino and any information related to memorandums of understanding (MOUs) and/or funding from the casino to the departments and other aspects of city funding. We have identified six cities of comparable size to Richmond that have opened casinos during the past 12 years for the first time (also including one that has added a casino to a market that had not had a new casino in over 25 years).

While we have attempted interviews in each of these cities, not all have provided feedback, but we provide below contact information for city leaders in each city for Richmond officials to try to reach out to, as we believe that speaking directly to cohorts in similar cities is the best way for Richmond officials to get unbiased opinions on what the pros and cons are of adding casinos, what they should ensure is in any Host Agreement, what the true impacts may be on crime and other public safety needs, and allay or affirm any other concerns there may be.

The cities that we have identified as being similar in various regards are:

- Pittsburgh, PA (Rivers Casino, operated by Rush Street Gaming (formerly Majestic Star Casino, operated by Majestic Star), open 2009)
- Baton Rouge, LA (L'Auberge Baton Rouge, operated by Penn National, open 2012, adding to Baton Rouge's incumbent two-casino market)
- Cincinnati, OH (Hard Rock Cincinnati (formerly Jack Cincinnati and Horseshoe Cincinnati), open 2013)
- Baltimore, MD (Horseshoe Baltimore, operated by Caesars Entertainment, open 2014)
- Cleveland, OH (Jack Cleveland, operated by Jack Entertainment, open 2016)
- Springfield, MA (MGM Springfield, open 2018)

As evident from the following table, each of the cities cited above have populations (2019 U.S. Census) in the range of 153,000 to 600,000, with Baton Rouge being nearly identical in size to Richmond. Each of the cities also has a large minority population, with Cleveland and Cincinnati having the most comparable racial composition to Richmond. Household income levels and poverty levels for each of these comparable cities are also similar, with Pittsburgh and Baton Rouge being the closest peers.

**TABLE 28: COMPARABLE CITIES WITH NEW CASINO DEVELOPMENT**

	RICHMOND	PITTSBURGH	BATON ROUGE	CINCINNATI	BALTIMORE	CLEVELAND	SPRINGFIELD
Total population, July 2019	230,436	300,286	220,236	303,940	593,460	381,009	153,606
% over age 18	82.4%	84.9%	78.4%	78.0%	79.3%	77.9%	75.2%
White non-Hispanic	40.8%	64.7%	36.6%	48.2%	27.5%	33.8%	31.2%
Black/African American alone	46.9%	23.0%	54.7%	42.3%	62.4%	48.8%	20.9%
Hispanic/Latino	6.9%	3.2%	3.7%	3.8%	5.3%	11.9%	45.0%
Asian	2.1%	5.8%	3.5%	2.2%	2.6%	2.6%	2.7%
Two or more races	3.4%	3.5%	1.3%	3.7%	2.5%	4.4%	4.5%
% age 16+ in civilian labor force 2015-2019	65.6%	63.7%	64.1%	66.0%	60.3%	59.1%	57.7%
Median household income (in 2019 dollars) 2015-2019	\$47,250	\$48,711	\$44,470	\$40,640	\$50,379	\$30,907	\$39,432
Per capita income past 12 mo. (in 2019 dollars) 2015-2019	\$33,549	\$34,083	\$28,491	\$30,531	\$31,271	\$21,223	\$21,499
% of persons in poverty	23.2%	20.5%	24.8%	26.3%	21.2%	32.7%	26.9%

Source: U.S. Census data

The feedback as provided below for each city includes a combination of individuals' qualitative feelings regarding the pros and cons of the casinos in their towns, as well as some quantitative data as it relates to levels of service needs and funding changes. As evident from the feedback, CSG sought opinions on the pros and cons of the development and operations, including what they wish they knew to expect or ask for when the Host Agreement was being negotiated, knowing what they know now. Nevertheless, the responses for what people would have wanted to do different was relatively minimal, as the proliferation of casinos across the U.S. over the past four decades, and discussions with other cities that have gone through the experience, has made it much easier to be proactive on mitigation issues and to have realistic expectations of what a new casino will and won't mean to a city. It also means being able to recognize that negative stereotypes of what new casinos meant to cities back in the early years (1980's) of proliferation across the U.S. through proactive mitigation measures and gaming regulations, and directed funding.

## CINCINNATI, OH

In Ohio, 5% of the gaming tax collected goes to the host city. In Ohio, the gaming tax rate is 33%, meaning that the host city gets 1.67%. There are also taxes allocated to counties, but they go to all counties, not specifically those that host casinos.

CSG interviewed Cincinnati Assistant Fire Chief Anson Turley, for which there is a fire station approximately one block from Hard Rock Cincinnati. Mr. Turley did not recall there being any notable increase in service calls when the casino was added in 2013 and does not consider the casino to be a trouble area. The casino has never come up as a subject in staff meetings, though he has no recollection of whether there was any agreement or equipment provided to the city in a host agreement. At present there is no MOU between the city and casino as it relates to Fire and EMS.

Based on data provided by Cincinnati Fire to CSG, there have been 570 service calls to the casino since January 1, 2018 (186 in 2018, 206 in 2019, 167 in 2020 and 11 YTD through February 19). Approximately half of all calls require EMS medical transport, which equates to approximately one every four days. Since January 2018 there have been 35 heroin-related calls including 8 cases where EMS had to administer Narcan for overdoses, or on average approximately 10 calls and 2.5 overdoses per year. Actual fire-related responses are rare, with personnel predominantly responding to false alarms, fire drills and people injured or stuck.<sup>28</sup>

CSG also interviewed Cincinnati Police Department Commander Doug Wiesman, who stated that the department has not conducted any studies regarding the casino impact. Wiesman stated that the Hamilton County Sheriff's Office is hired for police detail at the casino, and that the casino's volume of calls for service does not overwhelm them. Further, he opined that the Cincinnati Police Department and the Hamilton County Sheriff's Office have a good relationship with casino security and executive staff whenever issues arise and need to be addressed.<sup>29</sup>

The following tables, provided in Ohio Gaming Commission annual reports, present actual annual service calls to each of the Ohio casinos for the past two years, demonstrating relative frequency and types of calls needed for police response.

---

<sup>28</sup> CSG interview with Cincinnati Assistant Fire Chief Anson Turley, February 19, 2021.

<sup>29</sup> CSG correspondence with Cincinnati Police Commander, February 16, 2021.

**TABLE 29: EXCERPT FROM 2020 OHIO CASINO CONTROL COMMISSION ANNUAL REPORT - CRIMINAL STATISTICS**

Ohio Casino Control Commission - Criminal Statistics Fiscal Year 2020 (July 1, 2019 - June 30, 2020)						
	Cleveland	Toledo	Columbus	Cincinnati	Total of Each Type of Charge Statewide	
Assault	0	0	1	2	3	0.76%
Burglary	1	0	0	0	1	0.25%
Casino Cheat	16	5	0	8	29	7.37%
Counterfeiting	1	0	0	1	2	0.50%
Criminal Damaging/Endangering	1	0	0	1	2	0.50%
Criminal Trespassing	1	23	16	12	52	14.32%
Criminal Trespassing (VEP)	18	5	9	4	36	9.16%
Disorderly and/or Intoxicated	0	18	2	7	27	6.87%
Endangering Children	0	4	0	0	4	1.00%
Fake/False ID (Prohibitions)	3	0	19	3	25	6.36%
Falsification	0	0	1	0	1	0.25%
Inducing Panic	1	0	0	0	1	0.25%
Making False Alarms	1	0	0	0	1	0.25%
Menacing	0	1	0	0	1	0.25%
Misuse of Credit Card	2	0	0	0	2	0.50%
Money Laundering	0	0	0	2	2	0.50%
Obstructing Official Business	0	7	0	6	13	3.31%
Operation of an Illegal Casino	0	0	0	32	32	8.14%
Other Offenses	1	8	0	2	11	2.80%
Possession of Controlled Substances	0	2	4	6	12	3.05%
Possession of Drug Paraphernalia/Illegal Use	0	1	0	1	2	0.50%
Public Indecency	0	0	0	2	2	0.50%
Receiving Stolen Property	1	0	0	0	1	0.25%
Resisting Arrest	0	7	1	3	11	2.80%
Robbery	2	0	0	0	2	0.50%
Tampering With Records	3	0	0	0	3	0.76%
Theft	17	9	21	25	72	18.32%
Underage, Aids Entry	1	3	2	0	6	1.52%
Underage, Attempted Entry	3	4	13	0	20	5.09%
Underage Entry	0	5	7	2	14	3.56%
Vandalism	1	1	0	0	2	0.50%
Voyeurism	0	0	1	0	1	0.25%
<b>Total of All Charges Per Casino</b>	<b>74</b>	<b>103</b>	<b>97</b>	<b>119</b>		
<b>Total of All Charges Statewide</b>					<b>393</b>	<b>100%</b>

\* Statistics represent charges as presented to prosecutor including felonies and misdemeanors.

\* Number of individuals charged statewide: 241

\* All Ohio casinos were closed March 13-June 18 in accordance with directives from the Ohio Department of Health.

TABLE 30: EXCERPT FROM 2019 OHIO CASINO CONTROL COMMISSION ANNUAL REPORT - CRIMINAL STATISTICS

Ohio Casino Control Commission - Criminal Statistics Fiscal Year 2019 (July 1, 2018 - June 30, 2019)						
	Cleveland	Toledo	Columbus	Cincinnati	Total of Each Type of Charge Statewide	
Aggravated Menacing	0	0	0	3	3	0.45%
Assault	2	2	0	0	4	0.60%
Burglary	1	0	0	0	1	0.15%
Carrying Concealed Weapons	0	0	0	1	1	0.15%
Casino Cheat	48	0	1	5	54	8.08%
Counterfeiting	1	0	0	0	1	0.15%
Criminal Damaging/Endangering	4	4	3	6	17	2.54%
Criminal Mischief	0	0	0	2	2	0.30%
Criminal Simulation	5	0	0	1	6	0.90%
Criminal Trespassing	3	19	41	22	85	12.72%
Criminal Trespassing (VEP)	38	5	17	12	72	10.78%
Disorderly and/or Intoxicated	1	15	7	11	34	5.09%
Drug Trafficking/ Agg. Drug Trafficking	1	2	0	2	5	0.75%
Endangering Children	0	0	2	0	2	0.30%
Fake/False ID (Prohibitions)	7	0	56	8	71	10.63%
Falsification	0	1	3	1	5	0.75%
Forgery	0	0	1	6	7	1.05%
Identity Fraud	0	0	1	0	1	0.15%
Menacing	0	0	0	6	6	0.90%
Misuse of Credit Card	0	0	2	0	2	0.30%
Money Laundering	0	0	0	6	6	0.90%
Obstructing Official Business	3	4	2	2	11	1.65%
Other Offenses	2	6	3	2	13	1.95%
Possession of Controlled Substances	2	6	5	3	16	2.40%
Possession of Drug Paraphernalia/Illegal Use	0	3	6	3	12	1.80%
Public Indecency	0	3	2	2	7	1.05%
Receiving Stolen Property	1	0	1	2	4	0.60%
Resisting Arrest	4	5	3	6	18	2.69%
Sexual Imposition	1	1	0	0	2	0.30%
Telecommunications/ Wire Fraud	0	0	0	6	6	0.90%
Theft	13	18	27	54	112	16.77%
Unauthorized Use of Motor Vehicle	0	0	1	0	1	0.15%
Unauthorized Use of Property	0	0	0	1	1	0.15%
Underage Consumption	0	1	2	0	3	0.45%
Underage, Aids Entry	5	0	3	1	9	1.35%
Underage, Attempted Entry	6	1	15	5	27	4.04%
Underage Entry	3	2	28	3	36	5.39%
Vandalism	3	1	0	0	4	0.60%
Voyeurism	1	0	0	0	1	0.15%
<b>Total of All Charges Per Casino</b>	<b>155</b>	<b>99</b>	<b>232</b>	<b>182</b>		
<b>Total of All Charges Statewide</b>					<b>668</b>	<b>100%</b>

\* Statistics represent charges as presented to prosecutor including felonies and misdemeanors.

\* Number of individuals charged statewide: 385



## SPRINGFIELD, MA

CSG interviewed Timothy Sheehan, Chief Development Officer, City of Springfield, in order to get an understanding of MGM Springfield's contribution as a downtown casino development and operation. Mr. Sheehan's observations were<sup>30</sup>:

- The city has seen nothing remotely resembling an impact on crime as a result of the casino;
- The casino is located diagonal from the convention center, and MGM has taken over the operations of the convention center,
  - Much like Richmond, Springfield had a shortage of hotel rooms to support the convention center, and the initial phase of development of MGM Springfield has not sufficed to meet the need. However, a 200+ room hotel is being added to the campus to support that need;
  - In planning, he wishes MGM had focused more on supporting and growing regional convention business;
- There does not appear to be a correlation between real estate values in the market and the casino opening, but values in the region have been overall appreciating;
- The most negative aspect is that there was a lot of vacant space nearby, and speculators bought but have not developed, hoping instead to cash in if/when MGM expands. So there has been no spinoff new business growth;
  - Sheehan wishes MGM's initial plan focused more on doing something to create a district around the casino – as noted, it is now in speculators' hands, not getting developed
- There is a need for a high-end performance venue, but MGM has not yet added one.

Mr. Sheehan also provided CSG with the Host Community Agreement between MGM (Blue Tarp Development, LLC) and the City of Springfield, dated May 14, 2013. The most significant point (as read by CSG) of the Agreement includes:

### COMMUNITY DEVELOPMENT GRANTS

Developer shall make a One Million Dollar (\$1,000,000) unrestricted grant to the City. In the event the Developer is not awarded a Category 1 license by the Commission having no material conditions that are unacceptable to Developer, the amount of such grant shall be credited by the City against the purchase price for 29 Howard Street (the Armory Building) at the closing of such purchase. In addition, recognizing the fact that: (i) workforce development requires a healthy and an educated workforce; and (ii) the Act requires that the Developer demonstrate how Developer proposes to address community development, the City Treasurer shall establish a separate fund (the "Community Development Fund") for the purpose of accepting and administering (pursuant to municipal finance appropriation laws and policies) annual grants from the Developer in the amount of Two Million Five Hundred Thousand Dollars (\$2,500,000).<sup>31</sup>

---

<sup>30</sup> CSG interview with Tim Sheehan, Chief Development Officer, City of Springfield, MA, February 12, 2021.

<sup>31</sup> Host Community Agreement by and between City of Springfield, Massachusetts and Blue Tarp Development, LLC, Page 19.

## CONTACTS IN OTHER MARKETS

In addition to the cities addressed above, CSG has reached out to city officials in Pittsburgh, Cleveland, Baton Rouge, Baltimore and Columbus. In the Pittsburgh market, the Western Pennsylvania Regional Data Center was responsive and provided links to several reports that were reflective of public health impacts, but all were dated/pre-casino opening and had minimal/negligible value. Officials in Cleveland, Baton Rouge, Baltimore and Columbus were non-responsive to our outreach, but may be more fruitful if coming from a city official than a research firm like CSG.

## BENEFITS AND MITIGATION OF IMPACTS

Casinos and resort casinos can enrich the quality of life for host community residents by being a source of entertainment, employment and income, but such developments have also the potential to provide some adverse impacts. Recognition and proactive mitigation of potential adverse impacts can ensure that a resort casino in Richmond is a clear benefit to the city and its residents.

While we note that there are numerous markets of similar size to Richmond that have opened casinos over the past 12 years, there are many others that have opened in much smaller towns. Even in the smaller towns, our research and interviews have revealed very little deleterious impact on community services in areas where a casino has opened, with public safety officials likening casinos to any other large business.

## MITIGATING IMPACTS THROUGH COMMUNITY AGREEMENTS WITH CASINOS

In order to ensure that the potential negative impacts of resort casino development are mitigated, the City of Richmond should enter into a legal agreement with its selected operator/developer. There is, however, little precedent for such agreements, as in years past most casino operations were purely overseen by state-level regulatory bodies, and local considerations were secondary. This state-led model resulted in some communities being left out of financial benefits and responsible for casino-related costs. There are, however, some recent examples of local government agreements with casino operators, including:

### NEW ORLEANS, LOUISIANA

Until recently, the Harrah's New Orleans Casino which opened in Downtown New Orleans in 1999, paid all of its gaming taxes (21.5%) directly to the State of Louisiana, which allocated only small annual payments to the City of New Orleans to subsidize dedicated police patrols surrounding the facility. The City of New Orleans, while the beneficiary of the jobs created and maintained by the casino, as well the increased tourism, and visitor spending, did not receive any direct mitigation payments from the casino until an agreement was signed in late 2019. Under this new agreement and in exchange for permitting a \$325 million renovation and expansion and re-branding the property as Caesars New Orleans, the casino operator will pay \$19.5 million over 3 years for infrastructure projects in New Orleans, as well as maintain at least 2,400 staff and add another 500 employees once the expansion is complete.

### EVERETT, MASSACHUSETTS

Prior to the development of Encore Boston Harbor in Massachusetts, Wynn Resorts was directed by the Massachusetts Gaming Commission to enter into a host community agreement with the City of Everett (where the property is located),<sup>32</sup> but also with the surrounding communities of Boston, Cambridge, Lynn, Malden, Medford, Melrose, and Somerville.<sup>33</sup> The host community agreement with Everett includes items such as:

---

<sup>32</sup> Host Community Agreements. Massachusetts Gaming Commission. <https://massgaming.com/about/community-mitigation-fund/host-surrounding-communities/host-community-agreements/> (Accessed March 2021)

<sup>33</sup> Surrounding Community Agreements. Massachusetts Gaming Commission. <https://massgaming.com/about/community-mitigation-fund/host-surrounding-communities/surrounding-community-agreements/> (Accessed March 2021)

### Wynn Resorts' Commitments and Payments to Everett

- Commitment to invest more than \$1 billion in the development of the Resort (which ultimately cost \$2.6 billion)
- Full opening at one time; no phased construction
- Mitigation of transportation infrastructure impacts
- Hiring preference to Everett citizens
- Remediation of environmental contamination at development site
- Public access to Resort's waterfront
- Support for local artists and art programs
- \$30 million advance payment for a Community Enhancement Fund
- \$25.25 million annually to the City of Everett after resort opening, including:
  - \$20 million in real estate taxes
  - \$5 million Community Impact Fee
  - \$250,000 contribution to Everett Citizens Foundation
  - An annual increase of 2.5% per year for all payments
- \$50,000 annual payment to purchase vouchers/gift certificates from Everett businesses as part of resort casino loyalty program
- Estimated \$2.5 million annually in hotel and restaurant taxes collected
- Payments for costs incurred by the City, including determining impacts, zoning and permitting, upgrading electric, gas and water/sewer infrastructure.

### Everett's Commitments to Wynn Resorts

- Support the project and assistance obtaining permits, certifications, legislation and regulatory approvals
- Pursue development and approval of a Municipal Harbor Plan
- Work to amend zoning and other land use regulations<sup>34</sup>

## TYRE, NEW YORK

As part of its gaming license application to the State of New York for its Lago Resort & Casino, Wilmore, Inc. and its operating partner Peninsula Pacific included:<sup>35</sup>

- Project Labor Agreement and Labor Peace Agreement
- Agreement with the Finger Lakes Workforce Investment Board
- Host Community Agreement with Tyre, NY, in which the developer agreed to pay all direct and indirect costs of the Town
- Fund the Seneca County Health Offices to address problem gaming issues
- Agreement with Finger Lakes Community College for training and career advancement

Additionally, part of the project's licensing agreement with the State of New York includes a provision for a 10% host county and municipality tax on the casino's gross gaming revenue.

<sup>34</sup> Summary of Wynn Resorts' Host Community Agreement with the City of Everett. Massachusetts Gaming Commission. <http://massgaming.com/wp-content/uploads/Host-Agreement-Summary1.pdf> (Accessed March 2021)

<sup>35</sup> Lago Resort & Casino Application Exhibits. New York Gaming Commission website. [https://www.gaming.ny.gov/pdf/Lago%20Resort%20&%20Casino%20Executive%20Summary%20\(redacted%20NA\).pdf](https://www.gaming.ny.gov/pdf/Lago%20Resort%20&%20Casino%20Executive%20Summary%20(redacted%20NA).pdf) (Accessed March 2021)

## DANVILLE, VIRGINIA

The City of Danville, Virginia recently entered into a development agreement with Caesars Entertainment with regard to its resort casino, and includes items such as requirements to maintain staffing levels, minimum annual payments to the City, a share of gaming revenues above the state-allocated share of taxes (a portion of which is dedicated to infrastructure improvements in the area surrounding the casino, with the lion share available for other City priorities), the purchase of City-owned property, a one-time mitigation payment, and financial contributions to the City's master planning process.

## BEST PRACTICES

These preceding examples demonstrate that cities have recently gained in their negotiating power with casino developers and operators. In most communities we spoke with there was no signed memorandum of understanding ("MOU") with the casino. However, and in general, representatives and officials in these communities conveyed an overall positive feeling toward the casino and felt that it was an asset to the town or county, while select few lamented not having an MOU with the casino. This is not to say that a Host Agreement or MOU is a bad or unnecessary practice, but mitigation needs at the host community level have rarely gone beyond ensuring sufficient infrastructure is in place to support changes in traffic volumes, utility infrastructure, and in rare circumstances, public safety labor and equipment needs. These should all be readily apparent as potential problems when considering site issues and projected traffic counts and are not correlated with casino gaming activities.

The mitigation of potential problems related to casino gaming activities is achieved through three avenues:

- Prevention of harmful and illegal gaming behavior
  - The casino operator should have processes in place (and any experienced operator will, often mandated) to have an exclusion program, either voluntary or imposed on an individual, which will keep them from gambling, with penalties imposed on the operator if they are permitted to play;
  - Security should ensure minors are not gaming;
  - Actively promoting help for those with issues related to problem gaming;
    - 0.8% of the State gaming tax is to be earmarked to fund problem gaming. Assuming the five casinos in Virginia collectively generate between \$1 billion and \$1.25 billion (\$200m-\$250m/casino), at an effective tax rate in the range of 19% to 20%, the statewide funding would be in the range of \$1.5 million to \$2.0 million per year.
- Pro-active handling of alcohol-related problems
  - Casino, restaurant and bar personnel need to be responsible to cut off intoxicated patrons.
- Ensuring a safe and secure environment
  - Security and surveillance should ensure that the resort area is safe from opportunistic criminal activity
    - Modern procedures at casinos across the U.S. have made them among the safest environments due to the heavy surveillance;
  - State-required background checks and stringent state-level regulatory requirements of casino license holders



- The criminal element related to organized crime, money laundering and related activities has been and continues to be reined in through extensive background checks that are required for casino operators, staff and vendors, as well as recognition and reporting of suspicious activity with respect to financial transactions on the casino floor.

Additionally, communities considering casino development need apply the same development standards as they would to any other large-scale project. Host community agreements can include items such as:

- **Traffic** mitigation and infrastructure needs
  - For mitigation issues outside the footprint of the resort, traffic studies need to be completed to demonstrate that the roadway infrastructure is sufficient to support increased traffic, with the developer needing to take responsibility for necessary changes to roadways/interchanges/dedicated turn lanes, etc.
- **Public services**
  - **Water** - In some markets water rights is an issue, in which case an analysis would need to be completed to demonstrate how the addition of a casino resort to the market will impact availability of water to the community.
  - **Police, fire and EMS** demands, as briefly discussed above in terms of Cincinnati and Springfield, also need to be evaluated in terms of whether the casino resort will create stress on service provision.
    - In a city the size of Richmond, the answer will almost certainly be no.
  - **Housing and Schools**
    - While pressures on housing and schools are of public concern, we have not found significant impacts on housing demand or housing values as a direct result of casino development, and we expect none in Richmond. Similarly, we expect no changes in school needs as a result of such development.
- **Jobs** requirements
  - The number of resort casino employees can and should be included in host community agreements.

## POTENTIAL BENEFITS FROM RESORT CASINO DEVELOPMENT

There is no one model for host city relationships with their casinos, and benefits that accrue to a jurisdiction depend in part on how a geography is defined – i.e., whether it is a town, city, county, MSA or state. The larger the geography, the greater the nominal impacts, though the smaller the geography, often the greatest incremental impact. In general, the benefits that a host city or regional will enjoy from resort casino facilities includes:

- Job creation – both direct and indirect, resulting from the casino being a major procurer of goods and services in the region;
- Job training programs, enabling people to enter or re-enter the labor force;
- Revenue growth for area businesses, as a major procurer of goods and services – the resort should complement businesses and not be cannibalistic, given a large percentage of demand will be from outside of Richmond;
- Increased average wages and aggregate regional incomes;
- Support for charitable causes – casinos are often a significant philanthropic entity in the community;

- Business community collaboration and leadership - Likely strong representation and participation in Chamber of Commerce events, community partnerships, coordination with the hotel/motel association and tourism authority planning;
- An expansion of entertainment (quality of life) options, both gaming and non-gaming events;
- A broadening of market hotel room supply and conference space, allowing for tourism growth and the related economic impacts;
- Fiscal impacts emanating from all activities, ranging from gaming taxes to room, food, sales and property taxes.

From a best practices perspective, the gaming industry is sufficiently mature now that casinos have a standard of practice to mitigate the potential negative issues, but with respect to yielding the best benefits for the host community, the needs of the specific community needs to be considered in order to design an agreement reflective of what is best for that specific host.

With respect to knowing what is best for the host community of Richmond, it is important to understand demographics of gamers in general across the country, and then how that may relate to the local and feeder market for a Richmond casino. The following section provides is a brief discussion of demographic studies on gaming behavior, as well as problem gaming behavior.

## CASINO GAMER PROFILE AND GAMING BEHAVIOR

Volumes of research have been conducted over decades regarding just who casino gamers are. Casino marketing departments continuously survey and interview their customers to understand their preferences and how best to market to them. CSG's principals continuously review such proprietary industry research, as well as scholarly research. As discussed above, the most comprehensive, unbiased industry research currently being conducted appears to be by SEIGMA, which found:<sup>36</sup>

- Men are more likely to gamble than women (77% of men vs. 70% of women)
- Middle-aged adults (25-64) are more likely to gamble than younger adults (75% of middle-aged adults compared to 55% of young adults)
- Those who identify as White are more likely to gamble than those who identify as Hispanic, Black, or Asian (75% of Whites compared to 63% of Hispanics, 66% of Blacks, 56% of Asians)

The Massachusetts Gambling Impact Cohort Study (MAGIC) has specifically tracked transitions between gaming behavior groups *pre-* and *post-*casino development in the state. The key findings of this research indicate:<sup>37</sup>

- Recreational Gamblers and Non-Gamblers display the most stable pattern of gambling behavior
  - 80% of Recreational Gamblers stayed Recreational Gamblers
  - 64% of Non-Gamblers remained Non-Gamblers
    - A sizable portion transitioned into Recreational Gambling
  - Only 49% of Problem or Pathological Gamblers stayed in this category
    - Sizable portions transitioned into At-Risk Gambling and Recreational Gambling
  - At-Risk Gamblers display the most unstable pattern of gambling behavior

<sup>36</sup> "Gambling Participation", SEIGMA Fact Sheet Number 03, June 2018.

<https://www.umass.edu/seigma/sites/default/files/Seigma-GamblingParticipation-FactSheet-F2-2018.pdf> (Accessed 2/20/21)

<sup>37</sup> "Cohort Transitions," MAGIC Fact Sheet, Number 01, June 2018. <https://www.umass.edu/seigma/sites/default/files/Magic-CohortTransitions-F3-2018.pdf> (Accessed 2/20/21)

- Only 37% remained in this category
- Most transitioned to Recreational Gambling
- As significant minority transitioned to Problem or Pathological Gambling

## PROBLEM GAMBLING

### INCIDENCE

According to the International Center for Responsible Gaming, approximately 1% of the adult population has a gambling disorder.<sup>38</sup> As such problem gaming should be a priority for State and City leaders with regard to the introduction of casino gaming in Virginia. Currently, State law allocates 8/10 of a percent of the gaming tax to problem gaming initiatives. Such funding will provide new services to Virginia residents that have not been available previously, although some level of problem gaming is certainly present in the state already.

Studies have indicated that the incidence of problem gaming does not necessarily increase with the addition of a casino to a region. The Commonwealth of Massachusetts in particular has been very active in studying the socio-economic impacts of casinos, both before they were legalized and since the casinos have become operational. Specifically, the Massachusetts Gaming Commission (MGC) embarked on the first ever comprehensive long-term study of the economic and social impacts of gaming. Most of the research for MGC was conducted by the University of Massachusetts School of Public Health and Health Sciences, which has an ongoing research project known as the Social and Economic Impacts of Gambling in Massachusetts (SEIGMA) reporting to the MGC and Department of Public Health.

According to SEIGMA there has been “no change in problem gambling in Springfield with the Opening of MGM Springfield.”<sup>39 40</sup>

### MASSACHUSETTS STUDY OF ECONOMIC AND SOCIAL IMPACTS OF GAMBLING

A number of studies have been conducted on the impacts of casino gambling on the social and economic welfare of gamblers and their communities. Few, however, have been comprehensive. CSG continually conducts our own research as well as keeping up to date on published studies. The following section summarizes some of the more relevant and recent published works addressing such impacts.

Prior to the opening of casinos in Massachusetts, SEIGMA’s survey of 10,000 Massachusetts adults found that 63% were recreational gamblers, 27% were non-gamblers, 8% were at-risk gamblers and 2% were problem gamblers. Demographically, SEIGMA found that those identifying as African-American were four times more likely than those who identify as White to be vulnerable to experience harm from problems with gambling, men were three times more likely than women, and those with only a high school diploma were three times more likely than those with a college degree.<sup>41</sup> But as will be

---

<sup>38</sup> “Key Research Findings,” International Center for Responsible Gaming. <https://www.icrg.org/research-center/key-research-findings> (Accessed 3/3/21)

<sup>39</sup> “Targeted Surveys,” SEIGMA Fact Sheet Number 15, November 2020.

<https://www.umass.edu/seigma/sites/default/files/Seigma-SpringfieldTargeted-FactSheet-V2-2020.pdf> (Accessed 2/20/21)

<sup>40</sup> While the SEIGMA study is continuously tracking the impacts from all Massachusetts casinos, only the Springfield property has been open long enough for full and meaningful analyses.

<sup>41</sup> SEIGMA Research Team (2018). Fact Sheet Number 9, June 2018.

<https://www.umass.edu/seigma/sites/default/files/Seigma-GamblingHarm-Fact-Sheet-F2-2018%20copy.pdf>

discussed further below, in the Springfield market SEIGMA found that the percentage of at-risk and problem gamblers actually declined after the opening of the casino.

In the 2018 “Social and Economic Impacts of Expanded Gambling in Massachusetts” report, SEIGMA authors state “As of mid-2018 (i.e., after the opening of Plainridge Park Casino and prior to the opening of MGM Springfield and Encore Boston Harbor), the evidence indicates the following (truncated by CSG to show most relevant topics)<sup>42</sup>:

- There has been no significant change in the prevalence of problem gambling or related indices (treatment seeking, bankruptcy, divorce/separation, suicides) at either a state level or in the PPC Host and Surrounding Communities (H&SC).
- There has been no significant change in the overall amount of crime at a state level or in the PPC H&SC. However, there has been an increase in credit card fraud and reports of lost property, suspicious activity, and traffic complaints in the Town of Plainville that can likely be attributed to the PPC. These increases, in turn, are largely attributable to an increased volume of visitors to the area.
- There has been a significant change in both statewide and regional attitudes towards gambling that likely reflects greater satisfaction with the current gambling landscape. Both in the state and in the PPC H&SC a greater portion of people now report being satisfied with the availability of gambling. Similarly, at a statewide level, a smaller portion of people now express the opinion that all forms of gambling should be legal. An additional statewide change is that fewer people indicate the benefits of gambling are equal to the harms. In the PPC H&SC, there has been a decrease in the percentage of people who believe casinos will be beneficial to Massachusetts and an increase in the percentage of people with more neutral opinions about PPC (i.e., more people believing it will be neither beneficial or harmful).
- There has been no significant change in population health (health, happiness, stress, substance use, addictions) at either a statewide level or in the PPC H&SC that can be attributed to casino introduction.
- There is no evidence of a statewide impact on real estate property values, residential building permits, or rental costs. Similarly, at a regional level it is unlikely that PPC has impacted property values or rental costs.

The Massachusetts Gaming Commission also released a voluminous report on the “Impact of MGM Springfield on Gambling Attitudes, Participation and Problem Gaming” in November 2020, comparing a pre-opening baseline of 2015 to a 2019 follow-up survey (one year after casino opening). The key findings, as defined in the report, were<sup>43</sup>:

## ATTITUDES TOWARD GAMBLING

There were several significant changes in attitudes toward gambling among residents of Springfield and surrounding communities between 2015 and 2019. First, compared to 2015, more residents surveyed in 2019 believed that the availability of gambling in Massachusetts was too high. Second, the majority of residents in both 2015 and 2019 believed that the harm of gambling to society outweighed the benefits with a significantly higher proportion feeling this way in 2019. Third, compared to 2015, more residents viewed the importance of gambling

---

<sup>42</sup> SEIGMA Research Team (2018). Social and Economic Impacts of Expanded Gambling in Massachusetts: 2018. Amherst, MA: School of Public Health and Health Sciences, University of Massachusetts Amherst. September 18, 2018. [https://www.umass.edu/seigma/sites/default/files/2018 SOCIOECONOMIC IMPACTS 2018-10-03.pdf](https://www.umass.edu/seigma/sites/default/files/2018%20SOCIOECONOMIC%20IMPACTS%202018-10-03.pdf), pages viii-ix.

<sup>43</sup> Massachusetts Gaming Commission, “Impact of MGM Springfield on Gambling Attitudes, Participation and Problem Gambling”, November 13, 2020. [https://massgaming.com/wp-content/uploads/Springfield-Targeted-Surveys-Report\\_11.13.20.pdf](https://massgaming.com/wp-content/uploads/Springfield-Targeted-Surveys-Report_11.13.20.pdf), pages v-vi.

as a recreational activity as “not at all important.” Finally, compared to 2015, fewer residents surveyed in 2019 viewed the impact of expanded gambling in Massachusetts as harmful and more residents held a neutral view. Taken together, these changes suggest that overall perceptions of gambling among residents of Springfield and surrounding communities became somewhat more negative but also less polarized between 2015 and 2019.

## GAMBLING PARTICIPATION

Between 2015 and 2019, overall gambling participation changed very little. There was a statistically significant increase in past year participation in daily lottery games that was likely due to changes in the question wording. Past year gambling at out-of-state casinos did not change significantly but there was a statistically significant increase in any casino gambling in the past year. This change was driven by the greater proportion of residents of Springfield and surrounding communities who gambled at both Massachusetts and out-of-state casinos in 2019. Beyond past year daily lottery play and overall casino gambling, there were no statistically significant changes in gambling behavior among residents of Springfield and surrounding communities between 2015 and 2019. Given the lack of changes in past year participation in most specific forms of gambling, we felt it was important to explore whether there were changes in overall gambling participation, overall lottery participation, and overall casino gambling in Massachusetts and out-of-state by specific demographic groups. There were no significant changes in overall gambling or overall lottery participation by gender, race/ethnicity and among adults aged 50 and over. The rate of overall casino gambling was significantly higher in 2019 compared to 2015 among males and females, among Blacks/Hispanics/Asians and Whites/Other, and among individuals aged 50 to 64 and those aged 65 and over. In contrast to most other demographic groups, the rate of overall casino gambling did not change significantly between 2015 and 2019 among adults aged 18 to 34 and those aged 35 to 49. Among adults aged 18 to 34, the rate of overall lottery participation was significantly lower in 2019 compared to 2015 (45.8% in 2019 compared to 62.5% in 2015). When it comes to educational attainment, rates of overall gambling and overall lottery participation changed very little among residents of Springfield and surrounding communities with different levels of education. The rate of overall casino gambling was significantly higher among those with a high school education or less and among those who attended or graduated from college in 2019 compared to 2015. This was not the case among those with graduate level education. With regard to income, there were no statistically significant changes in rates of overall gambling, overall lottery participation, or overall casino gambling among residents of Springfield and surrounding communities with annual household incomes of \$50,000 or higher. Among residents with annual household incomes lower than \$50,000, rates of overall gambling and overall casino gambling were significantly higher in 2019 compared to 2015.

## PROBLEM GAMBLING

One of the main negative social impacts of expanded gambling availability tends to be an increase in problem gambling. In epidemiological research, prevalence is a measure of the number of individuals in the population with a disorder at one point in time. In problem gambling prevalence surveys, individuals are classified on the basis of their responses to a valid and reliable problem gambling instrument. The Problem and Pathological Gambling Measure (PPGM) serves as the primary instrument to assess problem gambling in the SEIGMA study. Based on the PPGM, there was no change in the prevalence of at-risk and problem gambling between 2015 and 2019 among residents of Springfield and surrounding communities. We estimate that between 42,074 (9.3%) and 70,123 (15.5%) residents of Springfield and



surrounding communities were at-risk for or experiencing a gambling problem in 2015. In 2019, we estimate that between 36,421 (8.0%) and 63,281 (13.9%) adult residents of Springfield and surrounding communities were at-risk for or experiencing a gambling problem. Problem gambling prevalence rates can vary significantly across important subgroups in the population. We examined differences and changes in problem gambling prevalence across the same five demographic groups discussed earlier in relation to gambling participation. The only statistically significant change was a decrease in non-gambling (accompanied by a substantial but not significantly higher rate of recreational gambling) in 2019 among residents of Springfield and surrounding communities with annual household incomes under \$50,000.

## AWARENESS AND UTILIZATION OF PROBLEM GAMBLING PROGRAMS

Previous research has found that many people experiencing gambling problems recover without the aid of professional treatment. Indeed, the literature indicates that the number of people who have recovered on their own may greatly exceed the number of people who ever seek treatment. These findings highlight the importance of increasing public awareness and encouraging changes in attitudes and behavior among individuals experiencing mild or moderate difficulties to reduce their progression toward more severe gambling related problems. Between 2015 and 2019, there was a statistically significant reduction in the proportion of residents of Springfield and surrounding communities who indicated that they were aware of media campaigns to prevent problem gambling in Massachusetts in the past year. Almost half of the respondents in the 2015 survey (47.9%) were aware of problem gambling prevention media campaigns in 2015 but the proportion dropped to 32.1% in 2019. Awareness of problem gambling prevention programs other than media campaigns was lower than awareness of media campaigns in both surveys and the change between 2015 and 2019 was not statistically significant. It is possible that changes in the administration of problem gambling services in Massachusetts beginning in 2016, along with the end of heated public discussion of the casino issue in Western Massachusetts, contributed to these changes. Responses to email and telephone queries to two of the three Gamblers Anonymous meetings in the Springfield area indicated that these meetings have taken place for many years with little change in the number of attendees following the opening of the casino. There has been a much greater impact on these meetings from COVID-19, which has limited the number of participants to 10 rather than the more usual 25-30 attendees.

In May 2020 SEIGMA produced a report “Gambling Harms in Massachusetts: Evidence from the BGPS and BOPS” (Baseline General Population Survey and Baseline Online Population Survey). The report is valuable in that it not only quantifies and identifies the differences demographically in terms of problems resulting from gambling, it categorizes the problems in terms of health, illegal acts, family problems, financial problems, work/school, depression/suicide, or multiple issues, and the degree to which demographic cohort is most prone to each of these problems. The findings of the report are broad and informative, with some pertinent issues reported to be:

“Financial problems and health problems were the most common negative impacts reported by people experiencing gambling problems in Massachusetts; these are also the types of harm most commonly reported by regular gamblers in Massachusetts. Similarly, work/school problems and illegal acts were the least common negative impacts reported by people experiencing gambling problems and these are also the types of harm least likely to be reported by regular gamblers;



Higher rates of financial and health harms among males, young adults, Blacks and Hispanics suggest the importance of raising awareness about gambling-related harm with these groups. One important step toward mitigating gambling harm within communities would be to educate community-based organizations about the extent of gambling harm in their communities compared to levels of awareness of and availability of specialized services. Beyond community organizations, health professionals and financial counselors would benefit from a better understanding of the scope of gambling harm among their clientele as well as some knowledge of how to sensitively ask their clients about their gambling and the gambling of their family members and friends; and

A particular concern, given the higher rates of all types of gambling harm among regular gamblers with children in the household, is to raise awareness and improve screening among professionals working with families and among community organizations concerned with child welfare. Communities and professionals would benefit from a better understanding of the greater risk of gambling harm in households where one or both parents gamble regularly.”<sup>44</sup>

## CRIME

The Massachusetts Gaming Commission also has studied the impact of the casino on crime, in the report prepared for the commission by a crime analysis consultant titled “Assessing the Influence of Gambling on Public Safety in Massachusetts Cities and Towns: Analysis of changes in police data following one year of activity at MGM Springfield”, dated February 20, 2020.<sup>45</sup> The summary findings were:

MGM Springfield opened on 24 August 2018 in the midst of a dense, urban area with a historically higher-than- average, but decreasing, crime rate. The large number of patrons drawn to the casino and their associated offenses and victimizations have made the facility the top location for crimes and calls for service in the region, although the overall effect on the region’s numbers is mild. In the first year after MGM opened, the most conclusive evidence of effects on public safety has been in certain calls for service related to traffic and visiting population numbers, such as traffic collisions, traffic complaints, and disabled vehicles. Even these are regionally localized and seem to be affecting the southern communities more than the northern ones. There have also been a couple of micro locations close to MGM – principally Union Station in Springfield, a gas station on the same block as MGM, and commercial areas across the bridges in West Springfield – that have seen increased activity. The region has also seen increases in thefts from vehicles, fraud, and purse snatchings, but any direct MGM association remains uncertain.

The major findings of the crime analysis included the opinion that **from a crime perspective, the casino generated as much activity as a large shopping mall**, and that to the extent that the casino “caused” crime, it was **largely confined to the casino itself and did not spill over to the neighborhood**. There was no certain, direct correlation that they could point to regarding changes in crime levels outside of the casino area. This is wholly consistent with interviews CSG has conducted with police departments around the country. Nevertheless, we have attached Table 29 and Table 30 demonstrating data for Ohio casino police needs to show actuals in cities of comparable size to Richmond.

---

<sup>44</sup> “Gambling Harms in Massachusetts: Evidence from the BGPS and BOPS,” SEIGMA Social and Economic Impacts of Gambling in Massachusetts, May 22, 2020. [https://www.umass.edu/seigma/sites/default/files/Gambling\\_Harms\\_in\\_Massachusetts\\_BGPS\\_and\\_BOPS\\_Final.pdf](https://www.umass.edu/seigma/sites/default/files/Gambling_Harms_in_Massachusetts_BGPS_and_BOPS_Final.pdf) (Accessed 3/3/21)

<sup>45</sup> Christopher Bruce, “Assessing the Influence of Gambling on Public Safety in Massachusetts Cities and Towns: Analysis of changes in police data following one year of activity at MGM Springfield”, February 20, 2020. <https://massgaming.com/wp-content/uploads/Public-Safety-Impact-Report-Springfield-and-the-Surrounding-Communities-%E2%80%93-2.27.20.pdf>.

## DISCLAIMER

Certain information included in this report contains projections, estimates and/or forward-looking statements which Convergence Strategy Group has based on our current expectations about future events. These items include statements that reflect our existing beliefs and knowledge regarding the operating environment, existing trends, existing plans, public announcements, objectives, goals, expectations, anticipations, results of operations, future performance and business plans.

Further, statements that include the words “project,” “estimate,” “intend,” “plan,” “may,” “could,” “should,” “would,” “believe,” “expect,” “anticipate,” or other words or expressions of similar meaning have been utilized. These statements reflect our current judgment based on information available to us when producing this report and we undertake no duty to update such statements in the future.

Although we believe that assumptions and methodologies used in this report are reasonable, any or all of the estimates or projections in this report may prove to be incorrect. To the extent possible, we have attempted to verify and confirm estimates and assumptions used in this analysis. However, some assumptions inevitably will not materialize as a result of inaccurate assumptions, and/or unanticipated events and circumstances may occur. Consequently, actual results achieved during the period covered by our analysis will vary from our estimates and the variations may be material. As such, Convergence Strategy Group accepts no liability in relation to the estimates provided herein.

## GLOSSARY

**Adjusted gross receipts (AGR)** - the total amount of money exchanged for the purpose of chips, tokens, or electronic cards by casino gaming patrons less winnings paid to winners. AGR is used interchangeably in this report with “gross gaming revenue”

**Gross gaming revenue (GGR)** – the amount that casino players wager minus winnings; GGR is used interchangeably in this report with “adjusted gross receipts”

**Win per Visit** – the average amount that the casino earns per visitor (wagers less payouts)

**Win per Position** – the average amount that the casino earns per gaming position (slots = 1 position; table games = 6 positions) per day, typically on an annual basis

**RNA** – room nights available; a measure of hotel capacity which is equal to the number of hotel rooms multiplied by number of nights in operation, typically shown on an annual basis

**RND** - room nights of demand; a measure of hotel occupancy which is equal to the number of hotel rooms occupied, typically shown on an annual basis