THE INNOVATION GROUP

Feasibility and State and Local Revenue Impacts of Locating a Casino in the City of Petersburg

Prepared for:

JLARC – Joint Legislative Audit and Review Commission

October 2022

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EXECUTIVE SUMMARY

This report is designed to assist the Virginia Joint Legislative Audit and Review Commission (JLARC) in assessing the impacts and implications regarding a potential casino in Petersburg. Four municipalities in Virginia have approved casinos—Bristol, Danville, Norfolk, and Portsmouth—and development is underway in each. A fifth city, Richmond, was eligible but voters rejected the required local referendum in 2021. This report assesses the feasibility and state and local revenue tax impacts in the event that Petersburg receives a casino license in place of or in addition to Richmond. The report also assesses the impacts on existing and planned casinos in Virginia and on Rosie's historical horse racing (HHR) facilities.

The analysis begins with a Gaming Market Assessment (GMA) involving three potential development alternatives as measured against a baseline (Scenario 0):

- Scenario 0 assumes only the casino development that has been authorized to-date (Portsmouth, Norfolk, Danville, and Bristol) as well as authorized HHR facilities (Collinsville, Colonial Downs, Dumfries, Emporia, Hampton, Richmond, and Vinton).
- Scenario 1 assumes that a Petersburg casino is authorized and opens in 2027 and completes a full year of operation in 2028.
- Scenario 2 assumes that a Richmond casino is authorized and opens in 2027 and completes a full year of operation in 2028.
- Scenario 3 assumes that both a Petersburg casino and a Richmond casino are authorized.

Additionally, the report includes a Return-on-Investment (ROI) analysis and an Economic Impact Analysis (EIA) for the potential Petersburg casino. We have utilized realistically conservative assumptions throughout the modeling process.

Gaming Market Assessment

Methodology

A gravity model quantifies the effect of distance on the behavior of a potential patron and considers the impact of competing venues. The Petersburg gravity model included the identification of 21 discrete market areas based on drive times and other geographic features and the competitive environment. Gamer visits are generated from zip codes within each of the areas based on propensity and frequency factors and then distributed among the competitors based upon the size of each facility, its attractiveness and the relative distance from the zip code in question.

The gravity model was first calibrated to FY 2022 using publicly reported data from state gaming commissions. Competitive casinos were input into the model as discussed in the Competitive Environment section. Next, the analysis creates a Benchmark model for 2028 using projected population and income growth and modeling for the implementation of the four authorized Virginia casinos as well as the HHR expansion at Dumfries and addition of Emporia.

In addition to the local market revenue generated through the gravity model, casinos generate visitation and revenue from gamers from outside of a defined local market area. This out-of-market

gaming demand represents visits driven by reasons other than proximity of permanent residence, such as traffic intercept, tourism, visiting friends and family, seasonal residence, and variety of gaming experience.

The combination of gravity model and out-of-market revenue results in estimates of total Net Gaming Revenue (NGR, or net of free play promotional credits), which is consistent with public reporting in Maryland, Virginia, and West Virginia.

Net Gaming Revenue Results

Casino gaming revenue in Virginia is estimated to increase by 18% from the addition of a casino in Petersburg, by 29% from the addition of a casino in Richmond, and by 36% from the addition of casinos in Petersburg and Richmond. The gravity modeling projects that the largest market overlap and impact would fall on Rivers Portsmouth, followed by HeadWaters Norfolk, and Caesars Danville. Hard Rock Bristol lies far from either Petersburg or Richmond and thus the market overlap is very small.

Table 1: VA Casino Total NGR Results 2028

$000s	Petersburg	Richmond	HeadWaters	Rivers Portsmouth	Caesars Virginia	Hard Rock Bristol	VA Casino Total
0. Baseline	$0	$0	$226,449	$198,552	$255,966	$147,378	$828,344
Scenario 1	$203,558	$0	$209,766	$180,188	$238,173	$145,451	$977,136
Scenario 2	$0	$299,833	$206,410	$176,756	$238,656	$145,609	$1,067,264
Scenario 3	$140,339	$248,696	$197,998	$167,953	$227,797	$144,452	$1,127,236
$ Change							
Scenario 1			-$16,683	-$18,364	-$17,793	-$1,927	$148,791
Scenario 2			-$20,038	-$21,796	-$17,310	-$1,769	$238,920
Scenario 3			-$28,450	-$30,599	-$28,169	-$2,926	$298,891
% Change							
Scenario 1			-7.4%	-9.2%	-7.0%	-1.3%	18.0%
Scenario 2			-8.8%	-11.0%	-6.8%	-1.2%	28.8%
Scenario 3			-12.6%	-15.4%	-11.0%	-2.0%	36.1%

Source: The Innovation Group

For the purpose of calculating the net impacts to state and local taxes, we have also assessed the NGR impacts to the Commonwealth's HHR facilities. The following table summarizes the gravity model results for the HHR facilities. In total, HHR revenue is projected to decline by between $46 million and $104 million. The Rosie's facility in Richmond is projected to experience the heaviest impact, followed by Colonial Downs. The Rosie's facility in Hampton would have already been heavily impacted by the casinos in Norfolk and Portsmouth.

Table 2: VA HHR Gravity Model NGR 2028 by Scenario

$000s	Colonial Downs	Rosie's Richmond	Hampton	Dumfries	Collinsville	Vinton	Emporia	Total
0. Baseline	$42,201	$119,838	$68,495	$118,608	$180	$4,124	$11,144	$364,589
Scenario 1	$32,277	$97,779	$64,468	$112,101	$126	$3,239	$8,402	$318,392
Scenario 2	$25,188	$66,172	$62,967	$109,131	$129	$3,167	$8,729	$275,484
Scenario 3	$22,993	$62,535	$60,208	$104,689	$103	$2,719	$6,856	$260,104
Impact								
Scenario 1	-$9,923	-$22,059	-$4,027	-$6,507	-$54	-$885	-$2,743	-$46,198
Scenario 2	-$17,012	-$53,666	-$5,528	-$9,477	-$51	-$957	-$2,415	-$89,105
Scenario 3	-$19,208	-$57,303	-$8,286	-$13,919	-$76	-$1,405	-$4,288	-$104,485

Source: The Innovation Group

Gaming Tax Results

Table 39 shows the gaming tax implications by scenario. Casino net gaming revenue (NGR) is subject to the following calendar-year tax schedule:

- 18% on the first $200 million of NGR
- 23% on NGR above $200 million to $400 million
- 30% on NGR above $400 million

As shown in Table 1, no casino is projected to reach the $400 million threshold for the top tax bracket of 30%.

The casino gaming tax is distributed as follows:

- Local designees receive 6% of NGR
- The Problem Gambling Treatment and Support Fund receives 0.8% of the total tax
- The Family and Children's Trust Fund receives 0.2% of the total tax
- The remainder reverts to the state

HHR wagering is taxed on handle (total wagering before prize payouts), with the state receiving a commission of 0.75% of handle and the local designee 0.5% for a total of 1.25%. The HHR hold percentage typically averages 8.7%, resulting in an effective tax rate on revenue of 14.4%.

Petersburg is estimated to lead to a net gain of total state and local gaming taxes of $18.6 million in Scenario 1 and $5.2 million in Scenario 3.

Table 3: VA Gaming Tax Results 2028

$000s	Potential Casinos	4 Authorized Casinos	Less Impact on HHR Commissions	Total Net	Net Gain from Petersburg
Local					
0. Baseline	$0	$49,701	$0	$49,701	
Scenario 1	$12,214	$46,415	-$2,655	$55,973	$6,272
Scenario 2	$17,990	$46,046	-$5,121	$58,915	
Scenario 3	$23,342	$44,292	-$6,005	$61,629	$2,714
PG & Family/Children					
0. Baseline	$0	$1,532	$0	$1,532	
Scenario 1	$368	$1,416	$0	$1,785	$252
Scenario 2	$590	$1,404	$0	$1,994	
Scenario 3	$725	$1,343	$0	$2,067	$74
Remainder of State Share					
0. Baseline	$0	$101,990	$0	$101,990	
Scenario 1	$24,237	$93,810	-$3,983	$114,064	$12,074
Scenario 2	$40,382	$92,941	-$7,681	$125,642	
Scenario 3	$48,394	$88,631	-$9,007	$128,018	$2,377
Total					
0. Baseline	$0	$153,223	$0	$153,223	
Scenario 1	$36,818	$141,641	-$6,638	$171,822	$18,599
Scenario 2	$58,962	$140,391	-$12,802	$186,550	
Scenario 3	$72,461	$134,266	-$15,012	$191,715	$5,165

Source: The Innovation Group

The following table shows the gaming tax flow to the City of Petersburg in Scenarios 1 and 3.

Table 4: Local Petersburg Gaming Tax Results

	2027	2028	2029	2030	2031
Scenario 1	$11,480,696	$12,213,507	$12,579,912	$12,894,410	$13,216,770
Scenario 3	$7,915,134	$8,420,355	$8,672,966	$8,889,790	$9,112,035

Source: The Innovation Group

The following table shows the gaming tax flow to the City of Richmond in Scenarios 2 and 3.

Table 5: Local Richmond Gaming Tax Results

	2027	2028	2029	2030	2031
Scenario 2	$16,910,605	$17,990,006	$18,529,706	$18,992,949	$19,467,772
Scenario 3	$14,026,427	$14,921,731	$15,369,383	$15,753,618	$16,147,458

Source: The Innovation Group

The following table shows the local gaming taxes for the four authorized casinos under each scenario.

Table 6: Local Gaming Tax Results, Four Authorized Casinos

$000s	HeadWaters	Rivers Portsmouth	Caesars Virginia	Hard Rock Bristol
0. Baseline	$13,587	$11,913	$15,358	$8,843
Scenario 1	$12,586	$10,811	$14,290	$8,727
Scenario 2	$12,385	$10,605	$14,319	$8,737
Scenario 3	$11,880	$10,077	$13,668	$8,667
$ Change				
Scenario 1	-$1,001	-$1,102	-$1,068	-$116
Scenario 2	-$1,202	-$1,308	-$1,039	-$106
Scenario 3	-$1,707	-$1,836	-$1,690	-$176
% Change				
Scenario 1	-7.4%	-9.2%	-7.0%	-1.3%
Scenario 2	-8.8%	-11.0%	-6.8%	-1.2%
Scenario 3	-12.6%	-15.4%	-11.0%	-2.0%

Source: The Innovation Group

Petersburg Return-on-Investment (ROI) Analysis

A high-level ROI analysis was conducted for Petersburg to identify the different levels of capital investment that would be viable under the two scenarios. The Return-on-Investment analysis utilized a discounted cash flow analysis (DCF), which uses unlevered cash flow (a company's cash flow before interest payments). A DCF analysis adjusts for the time value of money in estimating the value of an investment. NPV (net present value) is a comparison of a dollar today to a projected value for the same dollar at some point in the future or the past. NPV represents the present value of cash flows, minus the cost of development or capital outlay. A positive NPV value indicates a project is generally worth pursuing.

The cash-on-cash return is commonly used as a basis for determining the return rate of a real estate investment or transaction. This calculation determines the cash income on the cash invested. The Innovation Group calculated the cash-on-cash return rate for the project by utilizing the capital outlay as the denominator, and a numerator taken from Year 5 unlevered cash flow.

Table 7: Petersburg ROI Results ($MM)

	Scenario 1	Scenario 3
Discount Rate	12.50%	12.50%
Perpetual Growth Rate	1.50%	1.50%
Enterprise Value (Present Value of Cash Flows)	$550.1	$356.6
Less: Project Debt & Equity (Capital Investment)	($365.1)	($303.2)
Net Present Value (NPV) of Project*	$184.9	$53.5
Cash-on-Cash Return in Year 5	18.2%	14.4%

Source: The Innovation Group; *Also known as Residual Equity Value

Cash-on-cash expectations can vary by company, and in the gaming industry they can fluctuate with economic conditions and investment returns available elsewhere. From the mid-1990s but prior to the Great Recession, when there was dramatic growth in the gaming industry, investor expectations ranged from 20 to more than 25 percent. In the immediate aftermath of the recession, expectations tempered, and returns dropped to the 10 to 15 percent range as gaming revenue in established jurisdictions remained relatively flat into 2014. As normative growth has resumed in the industry, return expectations have started to rise again, into the 15 to 20 percent range.

The development program behind the Scenario 1 capital investment includes 1,700 slot machines, 70 table games, a sportsbook, food and beverage venues totaling 600 seats, a 300-room hotel, and a 1,500-seat events center. The Scenario 3 program includes 1,300 slot machines, 55 table games, a sportsbook, food and beverage venues totaling 555 seats, a 250-room hotel, and a 1,500-seat events center.

Petersburg Economic Impact Analysis

The following section details our Economic Impact Analysis. Ongoing impacts from operations are assessed on a gross basis for the city of Petersburg ("Host Region") and a net basis for the Commonwealth (net of impacts on competing Virginia casinos and HHR facilities). As shown in the following table, 52% of Petersburg NGR is estimated to represent new gaming revenue to the state in Scenario 1 and 33% in Scenario 3.

Table 8: Petersburg "New" NGR Analysis

	Scenario 1	**Scenario 3**
VA Market Growth	$73,214,440	$23,911,432
Diversion of Out-of-State Casinos	$19,968,286	$11,877,628
Net Out-of-Market Capture	$12,153,383	$10,675,252
Total New VA NGR	$105,336,110	$46,464,311
% of Total	**51.7%**	**33.1%**

Source: The Innovation Group

Methodology

The economic benefits—the revenues, jobs, and earnings—that accrue from the annual operations of an enterprise are termed ***ongoing*** impacts. The construction phase of a project is considered a ***one-time*** benefit to an area. This refers to the fact that these dollars will be introduced into the economy only during construction; construction impacts are expressed in single-year equivalence to be consistent in presentation with ongoing annual impacts.

The economic impact of an industry consists of three layers of impacts:

1. Direct effects—the economic activity that occurs at the casino
2. Indirect effects—the impact of the casino's direct expenditures on other business sectors: for example, the advertising firm who handles a casino's local media marketing.
3. Induced effects—impacts resulting from the spending of labor income: for example, casino employees using their income to purchase consumer goods locally.

The IMPLAN analysis expresses impacts (direct, indirect, and induced) for the following four economic variables:

Employment is measured in IMPLAN and by the U.S. Census as headcount, in other words the number of full and part-time workers supported by an economic activity.

Labor Income (LI) is compensation to all workers both employees and owners in terms of wages and salaries as well as benefits and payroll taxes. Profits from self-employed businesses can also be included in this category as compensation to the owner.

Value-Added (VA) measures the industry or event's contribution to Gross Domestic Product (GDP). It consists of labor income (as described above), taxes on production and imports (TOPI), and other property income (OPI, such as corporate profits, rent payments, and royalties). It is the difference between a business or industry's total sales and the cost of all input materials or intermediate expenditures. $VA = LI + TOPI + OPI$

Output is the total value of industry production; it consists of value-added plus intermediate expenditures (IE). Output is frequently the total price paid by consumers for a good or service. $Output = VA + IE$

Annual Economic Impacts from Operations

A casino in Petersburg would result in ongoing economic benefits that will accrue annually. The direct inputs were derived from The Innovation Group's gaming market assessment and proforma analysis using Year 2 (2028) inputs, the first year of stabilized operations.

The following table shows the FTE (full-time-equivalent) staffing positions and projected average 2027 compensation from payroll (salaries/wages, benefits, and payroll taxes) resulting from the pro forma staffing model for the Petersburg casino in Scenarios 1 and 3. Tips are not included in the table below. The compensation averages are based on salaries and wages estimated **in the industry and not adjusted for the Petersburg area's cost of living.**

Table 9: Petersburg Employment and Average Compensation 2027

	FTEs Scenario 1	FTEs Scenario 3	Average Compensation
Executive	7	7	$323,378
Managerial/Supervisory	239	178	$94,099
Administrative	13	13	$47,367
Accounting & Other Professional	20	20	$86,827
Technical/Mechanical	49	40	$64,182
Cage/Cashier	65	44	$43,299
Dealers	235	162	$26,905
Line Workers (including F&B)	408	326	$32,604
Security/Surveillance	99	66	$48,685
Housekeeping	148	114	$29,665
Total/Average	**1,283**	**970**	**$48,893**
Average excluding Executive and Managerial/Supervisory			***$36,204***

Source: The Innovation Group

For the Economic Impact Analysis, FTEs are translated into total employees (including full and part-time workers) and estimates of tips for dealers and food and beverage (F&B) are added to Labor Income.

The following table shows the total or gross economic impact of the Petersburg casino on the local economy.

Table 10: Casino Operating Results ($MMs) – Local Petersburg Gross Impacts

	Employment	Labor Income	Value Added	Output
Scenario 1				
Direct Effect	1,561	$75.1	$148.2	$192.2
Indirect Effect	167	$7.0	$11.8	$24.2
Induced Effect	26	$0.9	$2.1	$3.7
Total	**1,754**	**$83.0**	**$162.2**	**$220.1**
Scenario 3				
Direct Effect	1,181	$56.8	$104.3	$134.4
Indirect Effect	120	$5.0	$8.5	$17.4
Induced Effect	21	$0.8	$1.7	$3.0
Total	**1,321**	**$62.6**	**$114.5**	**$154.7**

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

The following tables show the net statewide economic impact of the Petersburg casino, factoring in the impacts on the four authorized casinos, as well as on the potential Richmond casino in Scenario 3.

Table 11: Casino Operating Results ($MMs) – Statewide Net Impacts

	Employment	Labor Income	Value Added	Output
Scenario 1				
Direct Effect	808	$38.9	$76.7	$99.5
Indirect Effect	98	$4.4	$7.5	$15.2
Induced Effect	53	$2.7	$5.5	$9.2
Total	**960**	**$46.0**	**$89.7**	**$123.9**
Scenario 3				
Direct Effect	391	$18.8	$34.5	$44.5
Indirect Effect	45	$2.1	$3.5	$7.0
Induced Effect	26	$1.3	$2.7	$4.5
Total	**463**	**$22.2**	**$40.7**	**$56.0**

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

One-time Economic Impacts from Construction

The impact of construction only relates to expenditures made directly by the development company to design, build and outfit the physical structure. The cost of slot machines was separated out from since it is a very specialized product and is not expected to be available within the region. IMPLAN estimates what percentage of the purchases, including slot machines, will originate from within the study area based on its Social Accounting Matrix (SAM). Construction impacts are expressed on a single-year basis. Therefore, the employment figures, for example, represent person-year equivalents; for a construction period of two years, the actual number of workers onsite would be half the person-year equivalent.

Table 12: Casino Construction Gross Impacts ($MMs) – Statewide

	Employment	Labor Income	Value Added	Output
Scenario 1				
Direct Effect	2,393	$128.0	$133.3	$268.1
Indirect Effect	317	$18.1	$32.5	$62.5
Induced Effect	625	$31.0	$61.2	$103.7
Total	**3,335**	**$177.1**	**$226.9**	**$434.4**
Scenario 3				
Direct Effect	1,969	$105.3	$109.7	$220.6
Indirect Effect	261	$14.9	$26.7	$51.4
Induced Effect	514	$25.5	$50.3	$85.3
Total	**2,744**	**$145.7**	**$186.7**	**$357.4**

IMPLAN Group, LLC, IMPLAN System; The Innovation Group

INTRODUCTION

This report is designed to assist the Virginia's Joint Legislative Audit and Review Commission (JLARC) in assessing the impacts and implications regarding a potential casino in Petersburg. Four municipalities in Virginia have approved casinos—Bristol, Danville, Norfolk, and Portsmouth—and development is underway in each. A fifth city, Richmond, was eligible but voters rejected the required local referendum in 2021. This report assesses the feasibility and state and local revenue tax impacts in the event that Petersburg receives a casino license in place of or in addition to Richmond. The report also assesses the impacts on existing and planned casinos in Virginia and on Rosie's historical horse racing (HHR) facilities.

The analysis begins with a Gaming Market Assessment (GMA) involving three potential development alternatives as measured against a baseline (Scenario 0):

- Scenario 0 assumes only the casino development that has been authorized to-date (Portsmouth, Norfolk, Danville, and Bristol) in accordance with announced development programs. It is a baseline scenario that serves as the benchmark for measuring the impacts of further casino development in Scenarios 1 and 2. The assumed baseline year for Scenario 0 is 2028, which is estimated to be the first full year of stable operation of a casino in Petersburg.
- Scenario 1 assumes that a Petersburg casino is authorized and opens in 2027 and completes a full year of operation in 2028. One result of the analysis is an estimate of the impact of a Petersburg casino on casinos authorized in the cities of Portsmouth, Norfolk, Danville, and Bristol.
- Scenario 2 assumes that a Richmond casino is authorized and opens in 2027 and completes a full year of operation in 2028. One result of the analysis is an estimate of the impact of a Richmond casino on the net gaming revenue at casinos authorized in the cities of Portsmouth, Norfolk, Danville, and Bristol.
- Scenario 3 assumes that both a Petersburg casino and a Richmond casino are authorized. The analysis assesses whether locating a casino in both Petersburg and Richmond is feasible and what the collective impact of those casinos would be on casinos authorized in the four other cities, assuming that the Petersburg and Richmond casinos open in 2027 and complete a full year of operation in 2028.

For each scenario, the Gaming Market Assessment utilizes a gravity model analysis to identify the projected net gaming revenue (NGR)[1] and state and local tax revenues generated by a casino located in Petersburg and the impact on other authorized locations in Virginia, as well as on the potential Richmond casino (from the results of Scenario 3).

[1] Net Gaming Revenue (NGR) refers to amount wagered (for example, coin-in to a machine) minus prizes awarded (or Gross Gaming Revenue) minus the value of redeemed free play credits. It is equivalent to Adjusted Gross Receipts (AGR) as defined by Virginia code, title58.1/chapter41/section58.1-4100.

After the GMA, the report conducts a Return-on-Investment (ROI) analysis utilizing a proforma operating model and development cost model to validate the potential viability of a Petersburg location in Scenarios 1 and 3.

Finally, the report includes an Economic Impact Analysis (EIA) identifying the projected direct and indirect impacts including employment levels, wages, and GDP, both one-time impact from construction as well as on-going impacts from casino operations. The impacts are assessed on a gross basis for the city of Petersburg and a net basis for the Commonwealth (net of impacts on competing Virginia casinos and HHR facilities).

In establishing Scenario 0, we take note of the changes to the gaming landscape in Virginia that have occurred since 2019, including an expansion of charitable gaming, the legalization of sports betting, and the ability to play Lottery games online. Most significantly for the gravity model analysis, we assess the development progress for the four authorized casinos and their projected phasing and opening dates, as well as the growth of historical horse racing facilities.

In each scenario, a minimum capital investment of $300 million is assumed for each authorized casino, including Petersburg. All casinos are subject to the following state tax rates on gaming revenue:

- 1) 18% on the first $200 million of net gaming revenue of an operator each calendar year
- 2) 23% on the net gaming revenue > $200 million but <= $400 million each calendar year
- 3) 30% on the net gaming revenue that exceeds $400 million each calendar year

The Innovation Group analysis did not identify any Virginia casino that would reach the top tax bracket of 30% within the forecast period of this report.

COMPETITIVE ENVIRONMENT

The competition for Virginia's expanded gaming market will come from gaming facilities operating in neighboring states such as Maryland, West Virginia, Delaware, and North Carolina. The Innovation Group identified 20 existing competitors and 6 proposed gaming facilities in this market area.

Of the proposed gaming facilities, two are related to new or expanded HHR facilities, and the other four are proposed casino developments.

Table 1 presents the existing competitive casinos in the region, arranged by drivetime distance from Petersburg:

Table 13: Existing Competitive Casinos

Name	Location	Machines	Tables	Positions	Hotel Rooms	F&B**	Employees	Drivetime (Min.) from Petersburg
Rosie's - Richmond	Richmond, VA	700	0	700	0	3		27
Rosie's - Colonial Downs	New Kent, VA	587	0	587	0	4		45
Rosie's - Hampton	Hampton, VA	700	0	700	0	3		100
Rosie's - Dumfries	Dumfries, VA	150	0	150	0	3		108
Rosie's - Vinton	Vinton, VA	500	0	500	0	3		174
Rosie's – Collinsville	Collinsville, VA	30	0	30	0	1		174
MGM National Harbor	Oxon Hill, MD	2,200	170	3,220	308	13	2,706	175
Live! Casino & Hotel	Hanover, MD	4,000	200	5,200	310*	10	2,764	180
Hollywood Charles Town	Charles Town, WV	1,900	90	2,440	153	4		180
Horseshoe Baltimore	Baltimore, MD	2,350	131	3,136	0	5	1,364	196
Greenbrier	White Sulphur Springs, WV	320	37	542	710	18		202
Harrington Casino	Harrington, DE	1,400	30	1,580	0	4		231
Delaware Park	Wilmington, DE	2,000	85	2,510	0	10		232
Hollywood Perryville	Perryville, MD	800	22	932	0	2	313	235
Bally's Dover	Dover, DE	2,200	33	2,398	500	8		239
Ocean Downs	Berlin, MD	850	18	958	0	4	249	242
Rocky Gap	Cumberland, MD	600	10	660	216	6	324	244
Two Kings Casino	Kings Mountain, NC	1,000	0	1,000	0	1		261
Hard Rock Bristol****	Bristol, VA	870	21	996	0	3		305
Harrah's Cherokee	Cherokee, NC	3,000	160	3,960	1,108	12		367

Source: The Innovation Group, Various Gaming Boards and Commissions, CasinoCity.com., Google Maps *Onsite casino hotel; MD Live also has a 250-room offsite hotel. **Food and beverage venues within the property. ***Employee counts have not been updated since 2019. ****Represents current temporary facility. Final facility will include 2,700 slots, 100 tables, and 750 hotel rooms.

Existing

This section details the fourteen existing competitors within the gaming market categorized by state.

Virginia

There are four casinos currently authorized in Virginia, with one (Bristol) having recently opened in a temporary facility. Additionally, there are six historical horse racing facilities currently operating.

Bristol Hard Rock

The temporary Hard Rock casino in Bristol opened July 8, 2022 with 870 slots and 21 tables, earning nearly $500 win per position in its first three weeks of operation.

Table 14: Hard Rock Bristol Opening Performance

Slot AGR	Count	Table AGR	Count	Total AGR	Slot WPU	Table WPU	Positions	WPP
$10,236,489	870	$1,480,990	21	$11,717,478	$490	$2,938	996	$490

Source: Virginia Lottery.

Historical Horse Racing Facilities

There are six facilities in Virginia offering historical horse racing machines (HHR) under the Rosie's brand. Additionally, there is another HHR facility under development in Emporia. The following table shows results for FY2022 (through June).

Table 15: Virginia HHR Performance FY2022

	Collinsville	Colonial Downs	Dumfries	Hampton	Richmond	Vinton
Revenue	$6,489,813	$47,438,026	$29,653,856	$100,499,106	$120,321,413	$35,973,951
Units	37	583	146	700	697	357
WPU	$510	$223	$557	$393	$473	$276

Source: Virginia Racing Commission.

Maryland

The Maryland Lottery and Gaming Control Commission (MLGCC) was created in 2008 following a constitutional amendment authorizing slot machines at five locations throughout the state. The MLGCC awarded licenses for facilities within the counties of Anne Arundel, Baltimore City, Cecil, Allegany, and Worcester. In 2012, a referendum was approved to expand the gaming market allowing for table games at all existing facilities and a sixth casino license for Prince George's County. The following section details each facility in the existing Maryland gaming market.

Live! Casino & Hotel Maryland

The Maryland Live! Casino is located 15 miles southwest of Baltimore, just outside of Hanover, MD and approximately three hours from Petersburg. The casino opened in June 2012 adjacent to the Arundel Mills Mall near the junction of Baltimore Washington Parkway and State Route 100,

five miles south of Interstate I-95. The Arundel Mills Mall has over 200 indoor retail stores in addition to several restaurants and a 24-screen Cinemark movie theater. Several airport hotels are also located on the property, as the Washington-Baltimore International Thurgood Marshall Airport (BWI) is only two miles away.

Maryland Live! Casino is the largest gaming facility within the existing competitive set, containing around 4,000 slots and 200 table games, 50 of which are poker tables. The facility has several non-gaming amenities including ten on-site dining options and a live entertainment venue. The 17-story Live! Hotel opened in June 2018 featuring 310 luxury guest rooms and 52 suites, a spa and salon, a 1,500-seat event center, meeting facilities, an entertainment bar, and David's Cafe. Additionally, Live Lofts is a 250-room offsite hotel. The property also features a high-limit smoking patio, which is the first in Maryland and includes 12 gaming tables and over 150 slot machines.

Total annual revenues for Maryland Live! reached a high of $692.3 million in 2021, the almost $40 million higher than the previous high of $653.1 million in 2016, and a 58.1% increase over 2020, which was impacted by the COVID-19 pandemic. For the last few years, slot revenue as comprised around 70% of the facility's total revenue.

Fiscal Year 2022, which runs from July 2021 through June 2022, generated more than $714 million in total revenue, or an increase of about 18.8% over Fiscal Year 2021.

The following table shows the annual breakdown between slots and table revenue at the Maryland Live! facility.

Table 16: Maryland Live! Annual Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	$629,732,520		$400,728,150		$253,809,485		63.6%
2016	$653,149,783	3.7%	$399,340,298	-0.3%	$190,695,442	-24.9%	61.1%
2017	$544,992,891	-16.6%	$354,297,449	-11.3%	$184,279,809	-3.4%	65.0%
2018	$576,634,908	5.8%	$392,355,099	10.7%	$178,365,857	-3.2%	68.0%
2019	$600,916,230	4.2%	$422,550,373	7.7%	$138,371,857	-22.4%	70.3%
2020	$437,772,387	-27.1%	$299,400,529	-29.1%	$205,341,353	48.4%	68.4%
2021	$692,273,737	58.1%	$486,932,385	62.6%	$184,279,809	-10.3%	70.3%
FY2021	$622,497,176		$432,649,090		$189,848,086		69.5%
FY2022	$714,027,175		$498,442,361		$215,584,813		69.8%
% Change FY22/FY21	*14.7%*		*15.2%*		*13.6%*		
% Change FY22/2019	*18.8%*		*18.0%*		*55.8%*		

Source: Maryland Lottery.

Horseshoe Baltimore

Horseshoe Casino in Baltimore opened in late August 2014. It is the state's only urban casino, built on the former site of the Maryland Chemical Company in South Baltimore, just over three hours from Petersburg. The casino is located on a major thoroughfare, State Highway 295, just

north of the Interstate I-95 overpass. The casino neighbors existing entertainment facilities such as the M&T Bank Stadium and Oriole Park at Camden Yards. The casino does not have any on-site accommodations but offers discounts at multiple hotel partners in the area.

This facility is the third largest and the third highest revenue generating casino in the state after Maryland Live! and MGM National Harbor. It has a 122,000-square foot gaming floor and over 3,100 gaming positions. Prior to the pandemic, revenues at the property had declined each year since 2017 as a result of MGM National Harbor's opening in December 2016. After earning about $145.3 million in 2020, revenue increased to almost $208.9 million in 2021. However, 2021 still fell about 12.2% less than 2019's total revenue.

The following table is a breakdown of annual gaming revenue at the Horseshoe Baltimore Casino since 2015.

Table 17: Horseshoe Baltimore Annual Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	$289,452,530		$157,600,245		$131,852,286		54.4%
2016	$324,313,284	12.0%	$176,969,107	12.3%	$147,344,177	11.7%	54.6%
2017	$272,050,773	-16.1%	$156,087,809	-11.8%	$115,962,964	-21.3%	57.4%
2018	$259,900,845	-4.5%	$150,801,294	-3.4%	$109,099,550	-5.9%	58.0%
2019	$237,877,878	-8.5%	$138,524,708	-8.1%	$99,353,170	-8.9%	58.2%
2020	$145,282,468	-38.9%	$96,156,518	-30.6%	$49,125,950	-50.6%	66.2%
2021	$208,860,828	43.8%	$141,672,420	47.3%	$67,188,407	36.8%	67.8%
FY2021	$199,622,900		$137,392,898		$62,230,002		68.8%
FY2022	$211,170,927		$137,110,567		$74,060,361		64.9%
% Change FY22/FY21	*5.8%*		*-0.2%*		*19.0%*		
% Change FY22/2019	*-11.2%*		*-1.0%*		*-25.5%*		

Source: Maryland Lottery

Hollywood Perryville

The Hollywood Casino located in Perryville lies just north of Interstate I-95 near the John F. Kennedy Memorial Tollway Bridge over the Susquehanna River, an inlet to Chesapeake Bay, almost four hours away from Petersburg. The casino opened in September 2010 and added table games in March 2013.

Prior to the pandemic, the facility maintained revenues around $75 million, however in 2021, Hollywood surpassed $92 million in total revenue for this facility in 2021, the highest mark over the last seven years. Slot revenue has consistently been around 85%, only increasing slightly through the pandemic.

Revenues in Fiscal Year 2022 were roughly 6.2% higher than in Fiscal Year 2021 and 22.9% higher than the 2019 calendar year.

The following table highlights the annual gaming revenue at the Hollywood Perryville Casino since 2015.

Table 18: Hollywood Perryville Annual Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	$77,269,241		$65,275,658		$11,993,583		84.5%
2016	$75,296,270	-2.6%	$63,947,648	-2.0%	$11,348,622	-5.4%	84.9%
2017	$74,450,839	-1.1%	$63,707,085	-0.4%	$10,743,754	-5.3%	85.6%
2018	$76,009,282	2.1%	$65,496,883	2.8%	$10,512,399	-2.2%	86.2%
2019	$74,759,198	-1.6%	$64,936,319	-0.9%	$9,822,879	-6.6%	86.9%
2020	$59,195,842	-20.8%	$51,134,696	-21.3%	$8,061,146	-17.9%	86.4%
2021	$92,412,868	56.1%	$80,745,956	57.9%	$11,666,913	44.7%	87.4%
FY2021	$86,487,585		$75,432,100		$11,055,485		87.2%
FY2022	$91,877,795		$80,064,567		$11,813,229		87.1%
% Change FY22/FY21	*6.2%*		*6.1%*		*6.9%*		
% Change FY22/2019	*22.9%*		*23.3%*		*20.3%*		

Source: Maryland Lottery

Ocean Downs Casino

The Ocean Downs Casino opened in January 2011 at a harness racetrack dating to 1949 near Ocean City, MD. In December 2017 Ocean Downs Casino completed a renovation and rebranding project which included adding 100 slot machines, a special events room, and the grand opening of 10 table games at the facility. The track is situated one-half mile north of U.S. 50, the major highway leading to Ocean City. The property is roughly four hours from Petersburg.

Total annual revenues at Ocean Downs have been increasing since 2015 when total revenue was under $56 million. Prior to the pandemic, Ocean Downs generated roughly $79.3 million in total revenue in 2019. In 2021, revenue surpassed $94.5 million, the greatest total in the last seven years.

Fiscal Year 2022 approached $95 million, almost 20% greater than 2019 and almost 13% greater than Fiscal Year 2021.

The following table shows the annual revenue breakdown at Ocean Downs.

Table 19: Ocean Downs Annual Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	$55,889,526		$55,889,526		N/A		100.0%
2016	$58,470,069	4.6%	$58,470,069	4.6%	N/A	N/A	100.0%
2017*	$61,019,442	4.4%	$60,965,490	4.3%	$53,952	N/A	99.9%
2018	$75,804,421	24.2%	$68,028,287	11.6%	$7,776,135	14313.1%	89.7%
2019	$79,345,385	4.7%	$70,519,078	3.7%	$8,826,308	13.5%	88.9%
2020	$57,113,138	-28.0%	$50,952,546	-27.7%	$6,160,593	-30.2%	89.2%
2021	$94,521,022	65.5%	$83,576,752	64.0%	$10,944,270	77.6%	88.4%
FY2021	$84,327,656		$74,966,264		$9,361,393		88.9%
FY2022	$94,989,749		$84,997,996		$9,991,753		89.5%
% Change FY22/FY21	*12.6%*		*13.4%*		*6.7%*		
% Change FY22/2019	*19.7%*		*20.5%*		*13.2%*		

Source: Maryland Lottery. *Table Games added in December 2017.

Rocky Gap

The Rocky Gap Resort and Golf Course was developed in 1998 but did not begin casino operations until May 2013. The resort is situated around four hours from Petersburg, on the west side of the Rocky Gap State Park near Cumberland, MD and only one mile from exit 50 off Interstate I-68. The resort has 216 guest rooms, six onsite restaurants and lounges, an indoor pool, spa, golf course, and offers a variety of outdoor activities including: canoeing, stand-up paddle boards, kayaks, fishing gear rentals, and more. The entire outdoor Lakeside Terrace was remodeled in 2017.

Since 2015 and excluding the pandemic-impacted 2020, total revenue at Rocky Gap has been on the rise, exceeding $64 million in 2021. Slot revenues have made up more than 85% of total revenue each of the last seven years, peaking at 89.2% of total revenue in 2021.

Fiscal Year 2022 was about 8.3% greater than in Fiscal Year 2021, and almost 15% greater than the 2019 calendar year.

The following table displays the total revenue breakdown at Rocky Gap dating back to 2015.

Table 20: Rocky Gap Annual Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	$46,082,330		$39,442,593		$6,639,738		85.6%
2016	$50,123,716	8.8%	$42,827,956	8.6%	$7,295,760	9.9%	85.4%
2017	$53,808,924	7.4%	$46,026,283	7.5%	$7,782,642	6.7%	85.5%
2018	$54,779,408	1.8%	$47,648,148	3.5%	$7,131,260	-8.4%	87.0%
2019	$57,121,427	4.3%	$49,601,407	4.1%	$7,520,020	5.5%	86.8%
2020	$42,937,221	-24.8%	$37,657,010	-24.1%	$5,280,212	-29.8%	87.7%
2021	$64,556,047	50.3%	$57,557,759	52.8%	$6,998,288	32.5%	89.2%
FY2021	$60,543,168		$53,351,810		$7,191,358		88.1%
FY2022	$65,584,933		$58,526,303		$7,058,630		89.2%
% Change FY22/FY21	*8.3%*		*9.7%*		*-1.8%*		
% Change FY22/2019	*14.8%*		*18.0%*		*-6.1%*		

Source: Maryland Lottery.

MGM National Harbor

In December 2016, MGM National Harbor was opened in Oxon Hill, MD, located in Prince George's County, just under three hours from Petersburg. The facility is situated along the eastern shore of the Potomac River just south of Interstate I-495 near Washington D.C. The resort includes a 24-story 308 room hotel with amenities, 18,000 square feet of high-end retail space, a 27,000 square foot spa and salon, a 3,000-seat theater, 50,000 square foot meeting and convention facilities, and 125,000 square foot gaming floor that contains 2,200 slots, and 170 table games including poker. There are 13 dining options onsite.

By the end of the first full year of operations in 2017, National Harbor already had the highest grossing revenue of all Maryland casinos. In 2021, total annual gaming revenue approached $770 million. Almost 42% of total gaming revenue was attributed to table game play, which is more than Horseshoe Baltimore made in total revenue for the year.

Fiscal Year 2022 generated more than $823 million in total revenue, almost 20% greater than Fiscal Year 2021's revenue of around $692 million.

Table 21: MGM National Harbor Annual Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	N/A		N/A		N/A		N/A
2016*	$41,934,028		$24,362,462		$17,571,565		58.1%
2017	$608,627,387	1351.4%	$318,584,995	1207.7%	$290,042,392	1550.6%	52.3%
2018	$704,878,971	15.8%	$368,171,418	15.6%	$336,707,553	16.1%	52.2%
2019	$706,818,291	0.3%	$392,088,883	6.5%	$314,729,408	-6.5%	55.5%
2020	$483,614,629	-31.6%	$263,075,324	-32.9%	$220,539,305	-29.9%	54.4%
2021	$769,757,889	59.2%	$448,989,516	70.7%	$320,768,374	45.4%	58.3%
FY2021	$692,239,312		$386,599,451		$305,639,860		55.8%
FY2022	$823,093,990		$472,669,761		$350,424,229		57.4%
% Change FY22/FY21	18.9%		22.3%		14.7%		
% Change FY22/2019	16.5%		20.6%		11.3%		

Source: Maryland Lottery. *Open for 24 days in 2016.

West Virginia

West Virginia currently has five casinos operating within the state in addition to live racing. For this analysis, the only facilities identified as potential competitors were Hollywood Casino in Charles Town, Mardi Gras Casino, and Greenbrier Resort.

Hollywood Charles Town

The Charles Town Race Track began casino slot operations in 1998 after seven decades of live thoroughbred racing. The casino was rebranded to Hollywood Casino in July 2010 when the facility was allowed table games. The facility is located around three hours from Petersburg, near the junction of US Highway 340 and State Highway 9 in Charles Town, 65 miles northwest of Washington DC.

Prior to the pandemic, revenues had been on the decline from 2015 through 2019 as a result of the impacts of its Maryland competitors. In 2015, prior to the opening of National Harbor, total revenue at the facility approached $400 million. However, in the pandemic recovery year of 2021, revenue was below $300 million.

Fiscal Year 2022 revenue was about 27% greater than in Fiscal Year 2021, but just about 1.3% greater than the 2019 calendar year.

The following table shows the revenue breakdown of Hollywood Charles Town dating back to 2015.

Hollywood Charles Town Annual Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	$396,194,442		$307,267,580		$88,926,862		77.6%
2016	$368,614,763	-7.0%	$288,986,209	-5.9%	$79,628,554	-10.5%	78.4%
2017	$339,392,579	-7.9%	$273,887,597	-5.2%	$65,504,983	-17.7%	80.7%
2018	$334,224,640	-1.5%	$270,851,158	-1.1%	$63,373,482	-3.3%	81.0%
2019	$322,594,250	-3.5%	$260,590,330	-3.8%	$62,003,920	-2.2%	80.8%
2020	$213,496,525	-33.8%	$175,566,940	-32.6%	$37,929,585	-38.8%	82.2%
2021	$296,633,346	38.9%	$237,697,710	35.4%	$58,935,637	55.4%	80.1%
FY2021	$256,962,853		$211,880,923		$45,081,931		82.5%
FY2022	$326,677,824		$259,296,035		$67,381,790		79.4%
% Change FY22/FY21	*27.1%*		*22.4%*		*49.5%*		
% Change FY22/2019	*1.3%*		*-0.5%*		*8.7%*		

Source: West Virginia Lottery.

Greenbrier

The Greenbrier is a historic luxury resort located in the Allegheny Mountains near the state's eastern border with Virginia, roughly three hours and 20 minutes from Petersburg. The resort opened in 1778 but did not begin gambling operations until late 2009. The 11,000-acre property offers 710 rooms, including 33 suites and 96 guest homes, designer boutiques, meeting event space, 14 dining options, a mineral spa, 55 attraction/activities, and a 103,000 sqft gaming floor.

This unique casino is the smallest revenue generating property of the five gaming locations in West Virginia earning only $13.2 million in 2021. Unlike most other casinos, slot machine revenue comprises less than half of the total annual revenue. Revenues have fluctuated since 2015, with revenue increases in 2017, 2018, and 2021 and decreases in 2016, 2019, and the pandemic-impacted 2020.

Table 22: Greenbrier Annual Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	$9,778,251		$4,231,834		$5,546,416		43.3%
2016	$8,142,855	-16.7%	$3,993,420	-5.6%	$4,149,435	-25.2%	49.0%
2017	$8,714,640	7.0%	$4,527,003	13.4%	$4,187,637	0.9%	51.9%
2018	$11,312,811	29.8%	$4,955,731	9.5%	$6,357,080	51.8%	43.8%
2019	$10,477,768	-7.4%	$4,761,866	-3.9%	$5,715,902	-10.1%	45.4%
2020	$8,870,170	-15.3%	$3,912,092	-17.8%	$4,958,079	-13.3%	44.1%
2021	$13,197,380	48.8%	$5,784,284	47.9%	$7,413,097	49.5%	43.8%
FY2021	$12,236,412		$5,554,723		$6,681,689		45.4%
FY2022	$13,073,830		$5,211,279		$7,862,551		39.9%
% Change FY22/FY21	*6.8%*		*-6.2%*		*17.7%*		
% Change FY22/2019	*24.8%*		*9.4%*		*37.6%*		

Source: West Virginia Lottery.

Delaware

The Delaware gaming regulations enacted in 1995 allow for video lottery terminals (VLTs) to be located the state's three existing racetracks. These racinos were awarded table games in 2010 and began internet gaming in late 2013. All three are potential competitors for a casino based in Northern Virginia. They have traditionally drawn upon the Baltimore-Washington D.C. corridor for a significant portion of gaming revenue and thus they have experienced notable declines from the expanded gaming market in Maryland.

Delaware Park

Delaware Park remains the only thoroughbred horse racetrack in the state and has been in continual operation since first opening in 1937. The facility offers live seasonal racing and year-round simulcast wagering in addition to being one of a limited few on the east coast that allow parlay sports betting. The location is roughly two miles northwest of Interstate I-95 between Wilmington and Newark, and around four hours from Petersburg. The facility is easily accessible to interstate travelers by State Highway 7 and 58, or via transit using the SEPTA regional rail line traveling from Wilmington to Philadelphia, PA during weekdays. The Churchman's Crossing rail station is located on the southwest corner of the property.

Delaware Park is the best performing property within the state, with revenues ranging between $189 million and $169 million in the five years before the pandemic. 2021 generated revenues surpassing $180 million, including almost $160 million in slot revenue. Table games only comprise about 12% of total annual revenue at Delaware Park.

Fiscal Year 2022 brought in revenues approaching $190 million, more than 15% greater than Fiscal Year 2021 and over 11% greater than the 2019 calendar year.

Table 23: Delaware Park Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	$160,496,275		$136,355,400		$24,140,875		85.0%
2016	$159,180,566	-0.8%	$135,140,500	-0.9%	$24,040,066	-0.4%	84.9%
2017	$164,557,969	3.4%	$138,835,600	2.7%	$25,722,369	7.0%	84.4%
2018	$167,011,552	1.5%	$139,998,639	0.8%	$27,012,913	5.0%	83.8%
2019	$169,122,406	1.3%	$143,612,358	2.6%	$25,510,048	-5.6%	84.9%
2020	$127,576,292	-24.6%	$113,460,000	-21.0%	$14,116,292	-44.7%	88.9%
2021	$181,309,871	42.1%	$158,857,500	40.0%	$22,452,371	59.1%	87.6%
FY2021	$162,710,097		$144,017,500		$20,002,317		88.5%
FY2022	$188,164,119		$163,368,920		$24,795,199		86.8%
% Change FY22/FY21	*15.6%*		*13.4%*		*24.0%*		
% Change FY22/2019	*11.3%*		*13.8%*		*-2.8%*		

Source: Delaware Lottery

Bally's Dover

Bally's Dover, formerly known as Dover Downs, is located roughly four hours from Petersburg in the northern suburbs of the state capital between U.S. Route 13 and State Highway DE-1. Opened in 1969, the racetrack remains the only gaming facility to offer a dual-purpose track for both harness and motorsport racing. The original gaming facility was built in 1995 to accommodate the new video lottery terminals but was expanded in later years to allow for additional amenities. The property was rebranded as Bally's Dover in November 2021. Bally's Dover is currently the only casino resort operating within the state.

Prior to the pandemic, revenues at Bally's Dover had been consistently generating around $150 million in revenue, with 2019 surpassing $157 million. In Fiscal Year 2022, the facility earned almost $163 million, slightly higher than the 2019 calendar year.

Table 24: Bally's Dover Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	$151,888,438		$134,559,600		$17,328,838		88.6%
2016	$150,958,687	-0.6%	$133,510,500	-0.8%	$17,448,187	0.7%	88.4%
2017	$150,959,858	0.0%	$133,477,200	0.0%	$17,482,658	0.2%	88.4%
2018	$149,023,782	-1.3%	$130,827,348	-2.0%	$18,196,434	4.1%	87.8%
2019	$157,594,317	5.8%	$138,364,153	5.8%	$19,230,164	5.7%	87.8%
2020	$110,570,400	-29.8%	$98,909,000	-28.5%	$11,661,400	-39.4%	89.5%
2021	$158,776,469	43.6%	$140,253,600	41.8%	$18,522,869	58.8%	88.3%
FY2021	$143,948,856		$128,125,500		$17,139,113		89.0%
FY2022	$162,982,607		$142,635,519		$20,347,088		87.5%
% Change FY22/FY21	*13.2%*		*11.3%*		*18.7%*		
% Change FY22/2019	*3.4%*		*3.1%*		*5.8%*		

Source: Delaware Lottery

Harrington Park

Harrington Park is Delaware's smallest gaming facility in terms of both size and revenue generation. The facility is located just under four hours of Petersburg, and 25 minutes south of Dover directly off of U.S. Route 13 in the southern suburbs of Harrington. The half-mile oval raceway opened in 1946 and currently offers live racing, simulcast wagering and sports betting in addition to casino operations.

In the years leading up to the pandemic, total revenues hovered around $90 million, peaking at about $94.5 million in 2019. In 2021, revenues surged to about $110 million, with less than 10% of the revenue generated from table games.

Fiscal Year 2022 generated about $115.8 million, more than 20% greater than Fiscal Year 2021 and over 22% greater than the 2019 calendar year.

Table 25: Harrington Park Gaming Revenue

	Total Revenue	% Change	Slot Revenue	% Change	Table Revenue	% Change	Slot % of Total
2015	$92,196,387		$80,859,500		$11,336,887		87.7%
2016	$88,518,150	-4.0%	$77,355,400	-4.3%	$11,162,750	-1.5%	87.4%
2017	$93,140,311	5.2%	$81,664,900	5.6%	$11,475,411	2.8%	87.7%
2018	$91,669,509	-1.6%	$81,536,592	-0.2%	$10,132,917	-11.7%	88.9%
2019	$94,672,086	3.3%	$84,049,313	3.1%	$10,622,773	4.8%	88.8%
2020	$70,230,779	-25.8%	$63,210,700	-24.8%	$7,020,079	-33.9%	90.0%
2021	$109,451,687	55.8%	$99,015,600	56.6%	$10,436,087	48.7%	90.5%
FY2021	$96,331,349		$86,993,300		$10,140,990		90.3%
FY2022	$115,756,717		$104,549,570		$11,207,147		90.3%
% Change FY22/FY21	*20.2%*		*20.2%*		*10.5%*		
% Change FY22/2019	*22.3%*		*24.4%*		*5.5%*		

Source: Delaware Lottery

North Carolina

North Carolina prohibits most forms of gambling with the exception of casino facilities located on federally recognized Tribal lands. Caesars Entertainment operates two casinos owned by the Eastern Band of Cherokee Indians tribe in North Carolina: the original and flagship Harrah's Cherokee Casino Resort and a newer satellite property, Harrah's Cherokee Valley River Resort in the southwestern corner of the state. These casinos are located outside the Virginia market area (more than six hours from Petersburg); however, as an established resort with hotel, Harrah's Cherokee would be expected to draw some gaming visits from the southwest and southside market areas as shown later in the report.

Harrah's Cherokee Casino Resort

Harrah's Cherokee Casino Resort is the larger, and closer, of the two properties and hosts more than 3,000 slot machines, and 160 table games for a total of 3,960 gaming positions. The property is owned by the Eastern Band of Cherokee Indians; however, it is operated by Caesars Entertainment. The casino features video poker, video gaming, poker, blackjack, craps, and roulette. Attached to the casino is the 21-story Harrah's Cherokee Hotel which offers 1,108 hotel rooms, full gym, indoor and outdoor pool, and cabanas and bar area. The property also features the Cherokee Golf Sequoyah National Golf Club, Mandara Spa, a night club, 11 food and beverage options, and a shopping center. As a Tribal owned casino, annual gaming revenues are not available to the public.

Catawba

The Catawba Indian Nation opened a temporary casino in Kings Mountain, NC, just west of Charlotte, in July 2021. A permanent casino resort is being planned and under review by the National Indian Gaming Commission. The proposed resort is likely to include a hotel, multiple food and beverage options, and a multi-use entertainment venue.

Virginia Proposed

Three additional casinos have been authorized in Virginia, in Danville, Norfolk and Portsmouth. A proposed casino for Richmond was not approved by voters in a 2021 referendum. Additionally, there is a major expansion planned for the Dumfries HHR facility, as well as a new 150-unit HHR facility being developed in Emporia.

Caesars Danville

In a joint venture with the Eastern Band of Cherokee Indians, Caesars is reporting a $650 million casino resort in Danville. Plans for the casino include a 500-room hotel, 1,300 slots, 85 live game tables, 24 electronic table games, a World Series of Poker-branded live poker room and a Caesars sports book. It is also slated to have a full-service spa, pool, bars, an entertainment venue that can accommodate up to 2,500 people and 40,000 square feet of meeting and convention space.

HeadWaters Resort & Casino (Norfolk)

The Pamunkey Indian Tribe has signed a development agreement with the City of Norfolk to build a $500M casino and hotel. The announced Norfolk plans include a casino with 3,000 slot machines and 150 table games, a hotel with 300 rooms, a spa and a rootop pool, multiple restaurants including a steakhouse, an event center and a rooftop entertainment area.

Rivers Casino Portsmouth

Rivers Casino Portsmouth is to be a $300 million casino resort at I-264 and Victory Blvd. The announced program lists restaurants, a 4-star hotel, a 3,000-seat event center, movie theater BetRivers Sportsbook, Topgolf Swing Suite, and retail stores. The food and beverage program features Admiral's Steak & Seafood, Starbucks, Mian, Slice Pizzeria, and Crossings Café.

Dumfries HHR Expansion

The Rose Gaming Resort is under construction next to I-95 in Dumfries. The resort is to be developed in two phases and is to feature a 305-room, six-story hotel, eight restaurants and bars, conference and meeting space, and 1,800 HHR terminals. The Rosie's franchise is being acquired by Churchill Downs from Peninsula Pacific Entertainment.

Emporia HHR

A 150-unit HHR facility is under construction in Emporia along Interstate 95 near Exit 11. Opening is scheduled for July 2023.

Richmond

Urban One had proposed a casino in Richmond with 1,800 slot machines, 100+ table games, a poker room and a sportsbook. The announced program also included a 250-room hotel, a 3,000-seat theater, and 15 restaurants and bars. The casino was not approved by Richmond voters, although city officials are in favor of holding a second referendum.

Methodology

In developing this analysis a gravity model was employed. Gravity models are commonly used in location studies for commercial developments, public facilities and residential developments. First formulated in 1929 and later refined in the 1940s, the gravity model is an analytical tool that defines the behavior of a population based on travel distance and the availability of goods or services at various locations. The general form of the equation is that attraction is directly related to a measure of availability such as square feet and inversely related to the square of the travel distance. Thus the gravity model quantifies the effect of distance on the behavior of a potential patron, and considers the impact of competing venues.

The basic formulation is that the interaction between two or more gaming venues is based on Newton's Law of Universal Gravitation: two bodies in the universe attract each other in proportion to the product of their "masses" – here, gaming positions – and inversely as the square distance between them. Thus, expected interaction between gaming venue i and market area j is shown as:

$$k \times \frac{N_i \times P_j}{d_{ij}^2}$$

where N_i = the number of gaming positions in gaming venue i, P_j = the population (21+) in market area j, d_{ij} = the distance between market area j and gaming venue i, and k = an attraction factor relating to the quality and amenities to be found at each gaming venue in comparison to the competing set of venues. When this formulation is applied to each gaming venue gaming trips generated from any given zip code are then distributed among all the competing venues.

The gravity model included the identification of 21 discrete market areas based on drive times and other geographic features and the competitive environment. Using our GIS software and ESRI database[2], the adult population (21 and over), latitude and longitude, and average household income is collected for each zip code.

Each of these market areas is assigned a unique set of propensity and frequency factors. Gamer visits are then generated from zip codes within each of the areas based on these factors. The gamer visits thus generated are then distributed among the competitors based upon the size of each facility, its attractiveness and the relative distance from the zip code in question. The gravity

[2]The GIS software used was ArcGIS. This software allows for custom data generally in a tabular format with a geographic identification code (census tract, zip code, latitude and longitude, or similar identifier) to be mapped or displayed and integrated with other geographic census based information such as location of specific population or roadways. ArcGIS is the most widely used programs in the geographic information systems industry; the data source behind the mapping program is Esri. Esri provides census demographic and psychographic data on a variety of geographic levels of detail ranging from census block groups and counties to postal zip codes. The data is updated annually and includes a current year estimate and a five-year forecast for the future.

model then calculates the probabilistic distribution of gamer visits from each market area to each of the gaming locations in the market.

Each travel distance/time is evaluated to determine the likely alternative gaming choices for residents of the region. The model is constructed to include only those alternative venues that are considered to be within a reasonable travel time. These include competing casinos that have the potential to attract patrons, or siphon off visits from the market. Travel distances and time have been developed through use of our GIS system.

The following section provides a description and definition of the various components of the model.

Gamer Visits

This measure is used to specify the number of patron trips to a gaming market, where an individual can make any number of separate visits in the course of a year. In order to estimate the gamer visits, market penetration rates, made up of the separate measures of propensity and frequency, are applied to the adult population in each zip code. A gamer visit can include more than one visit to a casino.

Net Gaming Revenue (or Net Win)

Net Gaming Revenue (NGR) or Net Win in this report refers to amount wagered (for example, coin-in to a machine) minus prizes awarded (or Gross Gaming Revenue) minus the value of redeemed free play credits. The main existing casino jurisdictions in the Virginia region (Maryland, Pennsylvania and West Virginia) allow free play credits to be subtracted before gaming taxes are applied, and therefore public reporting of gaming revenue shows NGR, which has been utilized in the model calibration. NGR is equivalent to Adjusted Gross Receipts (AGR) as defined by Virginia code, title58.1/chapter41/section58.1-4100. In some markets, free play is taxed and the public reporting shows Gross Gaming Revenue.

Propensity

Propensity measures the percentage of adults who will participate in casino gaming within the zip code. This varies based upon a number of factors, which includes the number of gaming venues, their type (i.e. landbased versus cruising riverboat versus dockside riverboat), games permitted, availability of other entertainment and leisure options, and most importantly distance from a gaming venue. After proximity, age and income are the most influential factors in propensity, with 35 and older having higher propensity. Surveys conducted by the American Gaming Association have shown that gamers have higher-than-average income. Propensity is fairly consistent among racial and ethnic groups although people of Asian origin tend to prefer table gaming. Propensity in the inner market areas from 0-50 miles can vary between the low thirty per cent range in a single casino market to the upper forty percent range, or more in a market like Las Vegas, for multiple casinos with a well-developed array of amenities.

Nationwide, visitation at casinos has declined compared to 2019 but WPV (win per visit) has risen. In the calibration of the model, we have mirrored the decline in visitation by reducing propensity from pre-COVID levels while increasing WPV.

Demographic variability is adjusted at the zip code level with the MPI score as discussed below. The propensity rates shown in this report reflect drive-time proximity and other supply issues (such as capacity constraints and games permitted—for example, in the FY2022 calibration, gaming in Virginia is limited to HHR machines).

Frequency

This measures the average number of visits that an adult will make annually to casinos in the subject market. Frequency is a function of annual gaming budget as indicated by income variations, the number of venues in the market, the type of gaming facility and most importantly distance from a gaming venue.

MPI (Market Potential Index)

Propensity also varies as a function of each market's average market potential index (MPI) score. MPI scores are generated by Simmons Survey, a respected consumer research firm that conducts a nationwide survey of consumer behavior, including propensity to gamble at a casino. This score is an indication of the degree of likelihood that a person will participate in gaming based upon their lifestyle type. The MPI score inflates or discounts the participation rate of each zip code. For example, if a market area has an overall participation rate of 4.0 (propensity of 40% times frequency of 10), an MPI score of 120 for a particular zip code would effectively inflate the participation rate of that zip code to 4.8 (4.0 times 120%). The overall MPI score for the market area is a weighted average of all the zip codes within the area.

Win per Visit (WPV)

Win per visit varies not only by gaming jurisdiction, but also in some cases by individual facilities. Normatively, win per visit is a function of distance and income. Gamers traveling greater distances tend to spend more per visit, typically making fewer gamer visits on average.

Attraction Factors

Attraction factors measure the relative attraction of one gaming venue in relation to others in the market. Attraction factors are applied to the size of the gaming venue as measured by the number of positions it has in the market. Positions are defined as the number of gaming machines plus the number of seats at gaming tables. A normative attraction factor would be one. When this is applied to the number of positions in a gaming venue there is no change in the size of the gaming venue as calculated by the model and hence its attraction to potential patrons. A value of less than one adjusts the size of the gaming venue downwards and conversely a value greater than one indicates that the gaming venue has characteristics that make it more attractive. Attraction factors can be based on a number of components including branding, the level and effectiveness of marketing efforts, and the level of quality and amenities of a facility. Attraction factors are also adjusted to model the presence of natural and man-made boundaries which impact ease of access and convenience of travel in the market area.

The sensitivity of the model to changes in these factors is not in the nature of a direct multiplication. For example, a doubling of the attraction factor will not lead to a doubling of the gamer visits attracted to the site. It will however cause a doubling of the attractive power of the gaming venue, which is then translated via non-linear equations into an increase in the number of gamer visits attracted to the gaming venue. This is based upon the location, size and number of

competing gaming venues and their relationship to the market area to which the equation is applied. The variation of these factors is based upon The Innovation Group's experience in developing and applying these models, and consideration of the existing visitation and revenues. The latter represents the calibration of the model and has been accomplished by adjusting attraction factors to force the model to recreate the existing revenues and patron counts. In this case attraction factors have been adjusted for each casino for each market area. This is based upon known visitation patterns.

Out-of-Market Visitation and Revenue

In addition to the local market revenue generated through the gravity model, casinos generate visitation and revenue from gamers from outside of a defined local market area. This out-of-market gaming demand represents visits driven by reasons other than proximity of permanent residence, such as traffic intercept, tourism, visiting friends and family, seasonal residence, and variety of gaming experience. This typically ranges between 4% and 10% of a casino's revenue depending upon location and the strength of the tourism market relative to the size of the local population. In the case of Bristol and Danville, the majority of their markets lies well outside the two-hour Petersburg market area.

Market Area Definition

The Petersburg's gaming market has been delineated into 21 distinct market areas, from which different participation rates may be expected depending on the level and location of competition that is present in the market currently and in the future. The following table and map show the market areas and their respective adult population (21 and over) and average household income (HHI) for the approximate 2-hour drivetime from Petersburg.

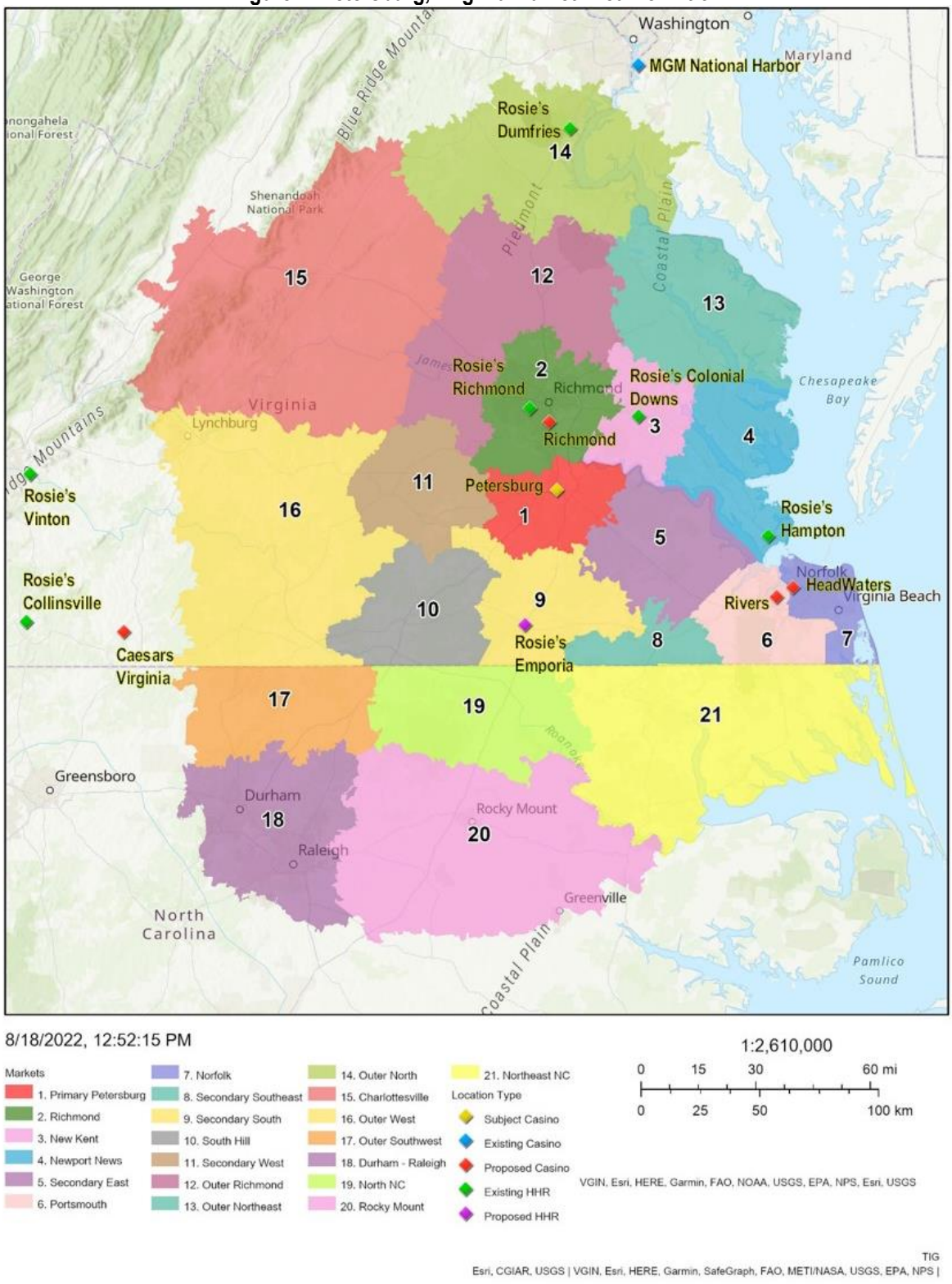
Note: The gravity modeling analysis in this report centers on Petersburg – the market area was not redefined for either Scenario 2 (Richmond only) or Scenario 3 (Richmond + Petersburg). The Richmond market area would effectively reach 20 minutes farther north but fall 20 minutes closer on the south, with Richmond picking up a little more of NOVA and a little less of north-central North Carolina. However, since the 2-hour ring for Richmond only contains 200,000 more gaming-age adults than Petersburg (less than 5%), the Petersburg market represents the vast majority of Richmond's local market. Furthermore, the difference between the two markets is at the margins of the 2-hour area, where penetration diminishes in either case because of distance. Furthermore, the Petersburg market represents the full local market for the Hampton Roads facilities since it reaches all the way to Virginia Beach and the Atlantic Ocean.

Table 26: Petersburg Market Area* Demographics

	Adult Pop 2022	Adult Pop 2027	CAGR	Average HHI 2022	Average HHI 2027	CAGR
1. Primary Petersburg	122,463	123,214	*0.1%*	$80,074	$92,757	*3.0%*
2. Richmond	757,044	782,076	*0.7%*	$112,290	$131,183	*3.2%*
3. New Kent	31,908	33,446	*0.9%*	$106,654	$122,737	*2.8%*
4. Newport News	411,663	416,573	*0.2%*	$98,732	$114,646	*3.0%*
5. Secondary East	43,854	44,769	*0.4%*	$100,420	$116,096	*2.9%*
6. Portsmouth	249,651	257,160	*0.6%*	$106,316	$123,123	*3.0%*
7. Norfolk	596,955	604,138	*0.2%*	$101,171	$117,042	*3.0%*
8. Secondary Southeast	17,199	17,231	*0.0%*	$78,947	$91,760	*3.1%*
9. Secondary South	25,147	25,030	*-0.1%*	$69,961	$80,597	*2.9%*
10. South Hill	28,628	28,542	*-0.1%*	$67,455	$76,005	*2.4%*
11. Secondary West	26,851	26,653	*-0.1%*	$74,277	$84,630	*2.6%*
12. Outer Richmond	127,835	134,809	*1.1%*	$124,098	$142,714	*2.8%*
13. Outer Northeast	54,143	53,798	*-0.1%*	$87,986	$99,589	*2.5%*
14. Outer North	595,305	623,335	*0.9%*	$138,152	$157,682	*2.7%*
15. Charlottesville	314,753	319,948	*0.3%*	$102,018	$117,866	*2.9%*
16. Outer West	182,530	181,839	*-0.1%*	$75,750	$87,319	*2.9%*
17. Outer Southwest	86,148	86,152	*0.0%*	$74,399	$88,034	*3.4%*
18. Durham-Raleigh	1,164,726	1,243,455	*1.3%*	$117,990	$136,321	*2.9%*
19. North NC	55,381	54,070	*-0.5%*	$62,268	$72,860	*3.2%*
20. Rocky Mount	353,073	361,125	*0.5%*	$76,562	$91,283	*3.6%*
21. Northeast NC	128,846	128,852	*0.0%*	$80,132	$92,899	*3.0%*
Total/Average	**5,374,103**	**5,546,215**	***0.6%***	**$106,193**	**$123,314**	***3.0%***
Virginia State Total	*6,525,410*	*6,650,440*	*0.4%*	*$121,168*	*$139,401*	*2.8%*
National	*249,159,630*	*253,566,159*	*0.4%*	*$105,029*	*$122,155*	*3.1%*

Source: ArcGIS/ESRI; The Innovation Group; CAGR=Compound Annual Growth Rate. *Note: approximate 2-hour area, keeping metro areas at the margin whole may extend slightly beyond 2 hours.

Figure 1: Petersburg, Virginia Market Area Definition



Model Calibration

The gravity model for the approximate 2-hour Petersburg market was calibrated to FY 2022 using publicly reported data from state gaming commissions. Competitive casinos were input into the model as discussed in the Competitive Environment section above. The following table shows the rates for propensity, frequency, and win per visit by market area that were used to re-create the actual conditions in the Base FY 2022 model. Win has been varied based on differences between market areas in average household income and travel time. These gaming visits and revenues reflect the total gaming revenue from **the defined Petersburg market area** in the last 12 months (***not* the total statewide Virginia casino market**).

As discussed above in the Methodology section, gaming revenue is shown as Net Gaming Revenue (NGR, or net of free play promotional credits) consistent with public reporting in Maryland, Virginia, and West Virginia.

Table 27 shows the results of the calibration model, which is based on the existing casino competition in the broad region as discussed in the Competitive Environment chapter above and the NGR generated in the twelve-month period through June 2022, which was the latest month available at the time the analysis was being set up. As such, it reflects conditions prior to any casino gaming in Virginia and excludes the Bristol casino that has recently opened. It represents gaming spend by residents of the defined Petersburg market areas at existing casinos and HHR facilities discussed in the Competitive Environment chapter.

Table 27: Local Market Gravity Model Calibration Base FY 2022 (LTMs thru June 2022)

	Gamer Pop	Propensity	Frequency	MPI	Visits	WPV	NGR (MMs)
1. Primary Petersburg	122,463	9.8%	7.0	98	83,103	$87	$7.2
2. Richmond	757,044	19.9%	8.9	105	1,408,005	$93	$130.6
3. New Kent	31,908	19.4%	8.5	102	53,794	$91	$4.9
4. Newport News	411,663	19.5%	8.6	105	722,154	$88	$63.7
5. Secondary East	43,854	9.6%	6.7	95	26,886	$96	$2.6
6. Portsmouth	249,651	9.9%	7.2	107	189,670	$98	$18.5
7. Norfolk	596,955	9.7%	6.9	104	412,982	$96	$39.6
8. Secondary Southeast	17,199	8.5%	5.2	102	7,669	$88	$0.7
9. Secondary South	25,147	8.2%	4.8	75	7,535	$84	$0.6
10. South Hill	28,628	7.4%	3.9	88	7,183	$84	$0.6
11. Secondary West	26,851	8.8%	5.6	82	10,814	$86	$0.9
12. Outer Richmond	127,835	9.4%	6.4	103	79,367	$106	$8.4
13. Outer Northeast	54,143	7.7%	4.2	91	15,832	$93	$1.5
14. Outer North	595,305	23.5%	8.0	107	1,198,995	$102	$122.1
15. Charlottesville	314,753	7.3%	3.8	98	84,479	$99	$8.3
16. Outer West	182,530	13.0%	3.6	93	79,340	$86	$6.9
17. Outer Southwest	86,148	6.2%	2.6	90	12,593	$88	$1.1
18. Durham-Raleigh	1,164,726	5.0%	1.7	101	97,949	$107	$10.5
19. North NC	55,381	6.8%	3.3	98	12,067	$82	$1.0
20. Rocky Mount	353,073	5.4%	2.0	93	35,701	$89	$3.2
21. Northeast NC	128,846	7.3%	3.8	90	32,177	$89	$2.9
Total	**5,374,103**				**4,578,293**	**$95**	**$435.8**

Note: Represents gaming activity in the defined Petersburg market area that is generated from each of the locations numbered 1—21.
Source: The Innovation Group; WPV=Casino Win per Visit; NGR=Net Gaming Revenue; LTM = Last 12 Months

The following table shows results by HHR property. Note: Collinsville and Vinton are located outside the defined Petersburg market area, and therefore little of their NGR is estimated to derive from the gravity model.

Table 28: Calibration Results VA HHR FY 2022

	Colonial Downs	Rosie's Richmond	Hampton	Dumfries	Collinsville	Vinton	Total
Gravity Model	$46,833,884	$117,529,303	$100,480,585	$28,900,912	$408,506	$5,331,187	$299,484,377
Out-of-Market	$604,142	$2,792,110	$18,521	$752,944	$6,081,307	$30,642,764	$40,891,788
Total NGR	**$47,438,026**	**$120,321,413**	**$100,499,106**	**$29,653,856**	**$6,489,813**	**$35,973,951**	**$340,376,165**
Positions	587	700	700	150	37	500	2,674
WPP	$221	$471	$393	$542	$481	$197	$349

Note: "Gravity Model" represents NGR attributed only to the defined Petersburg market area. "Out-of-Market" represents NGR derived from gamers residing beyond the Petersburg market area.
Source: The Innovation Group; WPP= Win per Position (per day); NGR=Net Gaming Revenue

Forecast Scenarios

The impact of potential casino development in Petersburg and Richmond is measured on a future baseline year of 2028, which is estimated to be their first stabilized year of operation and the second full year of operation:

The Innovation Group conducted assessments for three scenarios:

- **Scenario 1** assumes that a Petersburg casino is authorized and opens in 2027 and completes a full year of operation in 2028. One result of the analysis is an estimate of the impact of a Petersburg casino on casinos authorized in the cities of Portsmouth, Norfolk, Danville, and Bristol.
- **Scenario 2** assumes that a Richmond casino is authorized and opens in 2027 and completes a full year of operation in 2028. One result of the analysis is an estimate of the impact of a Richmond casino on casinos authorized in the cities of Portsmouth, Norfolk, Danville, and Bristol.
- **Scenario 3** assumes that both a Petersburg casino and a Richmond casino are authorized. The analysis assesses whether locating a casino in both Petersburg and Richmond is feasible and what the collective impact of those casinos would be on casinos authorized in the four other cities, assuming that the Petersburg and Richmond casinos open in 2027 and complete a full year of operation in 2028.

We have utilized realistically conservative assumptions throughout the modeling process.

Scenario 0: Benchmark Forecast

The first step in the analysis is to create a Benchmark model for 2028 using projected population and income growth and modeling for the implementation of the four authorized casinos. The

addition of casinos in Bristol, Danville, Norfolk, and Portsmouth would be expected to lead to significant increases in propensity and frequency in nearby market areas. The Benchmark forecast also includes the expansion at Dumfries and addition of Emporia.

Table 29: Total Market Gravity Model Forecast 2028, Scenario 0

	Gamer Pop.	Propensity	Frequency	MPI	Gaming Visits	WPV	NGR ($MMs)
1. Primary Petersburg	123,366	19.7%	8.8	98	210,800	$88	$18.6
2. Richmond	787,242	22.0%	8.9	105	1,622,357	$100	$162.0
3. New Kent	33,771	21.5%	8.5	103	63,291	$98	$6.2
4. Newport News	417,584	30.0%	10.7	105	1,408,634	$89	$124.8
5. Secondary East	44,957	26.8%	8.4	96	96,529	$94	$9.1
6. Portsmouth	258,703	30.5%	11.1	107	943,184	$90	$85.3
7. Norfolk	605,614	30.6%	11.2	104	2,163,922	$88	$191.4
8. Secondary Southeast	17,238	26.8%	8.4	102	39,459	$85	$3.4
9. Secondary South	25,007	30.5%	11.1	75	63,695	$77	$4.9
10. South Hill	28,525	26.1%	7.9	88	51,652	$82	$4.2
11. Secondary West	26,614	24.6%	7.0	82	37,487	$86	$3.2
12. Outer Richmond	136,261	18.9%	6.4	103	170,573	$108	$18.5
13. Outer Northeast	53,731	15.5%	4.2	91	31,627	$96	$3.0
14. Outer North	629,119	27.8%	9.1	107	1,704,003	$107	$182.2
15. Charlottesville	321,017	12.3%	3.8	98	144,744	$103	$14.9
16. Outer West	181,709	22.2%	5.6	93	211,707	$88	$18.7
17. Outer Southwest	86,155	20.9%	4.9	90	79,522	$89	$7.1
18. Durham-Raleigh	1,259,955	17.4%	3.3	101	743,062	$109	$81.1
19. North NC	53,813	24.0%	8.3	98	105,245	$80	$8.4
20. Rocky Mount	362,873	15.2%	2.5	93	128,127	$92	$11.8
21. Northeast NC	128,879	22.9%	6.0	90	159,024	$90	$14.3
Total	**5,582,135**				**10,178,646**	**$96**	**$973.0**

Note: Represents gaming activity originating in the defined Petersburg market area only. Does not represent statewide gaming activity.
Source: The Innovation Group; WPV=Casino Win per Visit; NGR=Net Gaming Revenue

The following table shows the Net Gaming Revenue forecast for Scenario 0 in thousands of dollars. Note: Bristol and Danville are located outside the defined Petersburg market area, and therefore most of their NGR is estimated to derive from outside the defined Petersburg gravity model market area. By contrast, the defined Petersburg market area covers the local Norfolk and Portsmouth markets, given that the gravity model market area runs all the way to Virginia Beach and the Atlantic Ocean.

Table 30: NGR 2028 Results by Property and Market Area (000s), Scenario 0

	Bristol	Danville	Norfolk	Portsmouth	Petersburg	Richmond
1. Primary Petersburg	$32	$193	$5,073	$6,058	$0	$0
2. Richmond	$8	$362	$9,681	$10,752	$0	$0
3. New Kent	$0	$1	$739	$836	$0	$0
4. Newport News	$3	$12	$24,737	$30,044	$0	$0
5. Secondary East	$0	$2	$2,818	$3,687	$0	$0
6. Portsmouth	$1	$3	$30,372	$50,145	$0	$0
7. Norfolk	$2	$7	$120,573	$63,733	$0	$0
8. Secondary Southeast	$0	$1	$1,057	$1,500	$0	$0
9. Secondary South	$0	$20	$633	$791	$0	$0
10. South Hill	$1	$1,029	$748	$855	$0	$0
11. Secondary West	$1	$1,015	$790	$890	$0	$0
12. Outer Richmond	$3	$143	$2,463	$2,687	$0	$0
13. Outer Northeast	$0	$1	$492	$535	$0	$0
14. Outer North	$7	$22	$42	$44	$0	$0
15. Charlottesville	$461	$3,909	$133	$141	$0	$0
16. Outer West	$995	$12,840	$21	$24	$0	$0
17. Outer Southwest	$390	$5,150	$15	$17	$0	$0
18. Durham-Raleigh	$6,693	$44,893	$1,915	$2,101	$0	$0
19. North NC	$12	$817	$1,140	$1,313	$0	$0
20. Rocky Mount	$57	$2,666	$3,454	$3,696	$0	$0
21. Northeast NC	$1	$47	$6,733	$6,585	$0	$0
Gravity Model subtotal	***$8,669***	***$73,133***	***$213,631***	***$186,434***	***$0***	***$0***
Out-of-Market	$138,709	$182,833	$12,818	$12,118	$0	$0
Total NGR	**$147,378**	**$255,966**	**$226,449**	**$198,552**	**$0**	**$0**

Note: "Gravity Model subtotal" represents NGR produced by visitors from the defined Petersburg market area to the properties in each column. Out-of-Market represents NGR produced by visitors from outside of the Petersburg market area. Total NGR represents the total statewide NGR for each property.
Source: The Innovation Group; NGR=Net Gaming Revenue.

Scenario 1: Petersburg Only

The addition of a casino in Petersburg would be expected to lead to increases in propensity and frequency in the Primary market area. WPV, however, tends to decrease with increased participation rates as more casual gamers enter the market and gaming budgets are stretched over more frequent visits.

The following table shows the inputs and total market results of the Scenario 1 forecast:

Table 31: Total Market Gravity Model Forecast 2028, Scenario 1

	Gamer Pop.	Propensity	Frequency	MPI	Gaming Visits	WPV	NGR ($MMs)
1. Primary Petersburg	123,366	30.7%	11.3	98	420,075	$81	$33.9
2. Richmond	787,242	26.3%	9.8	105	2,131,597	$97	$206.2
3. New Kent	33,771	24.8%	9.0	103	77,521	$96	$7.5
4. Newport News	417,584	30.0%	10.7	105	1,408,634	$89	$124.8
5. Secondary East	44,957	26.8%	8.4	96	96,529	$94	$9.1
6. Portsmouth	258,703	30.5%	11.1	107	943,184	$90	$85.3
7. Norfolk	605,614	30.6%	11.2	104	2,163,922	$88	$191.4
8. Secondary Southeast	17,238	26.8%	8.4	102	39,459	$85	$3.4
9. Secondary South	25,007	30.5%	11.1	75	63,695	$77	$4.9
10. South Hill	28,525	26.1%	7.9	88	51,652	$82	$4.2
11. Secondary West	26,614	24.6%	7.0	82	37,487	$86	$3.2
12. Outer Richmond	136,261	21.8%	6.8	103	208,923	$107	$22.4
13. Outer Northeast	53,731	17.8%	4.5	91	38,737	$95	$3.7
14. Outer North	629,119	27.8%	9.1	107	1,704,003	$107	$182.2
15. Charlottesville	321,017	12.3%	4.0	98	153,790	$103	$15.8
16. Outer West	181,709	22.2%	5.6	93	211,707	$88	$18.7
17. Outer Southwest	86,155	20.9%	4.9	90	79,522	$89	$7.1
18. Durham-Raleigh	1,259,955	17.4%	3.3	101	743,062	$109	$81.1
19. North NC	53,813	25.4%	8.3	98	111,092	$79	$8.8
20. Rocky Mount	362,873	17.5%	3.4	93	201,126	$92	$18.4
21. Northeast NC	128,879	22.9%	6.0	90	159,024	$90	$14.3
Total	**5,582,135**				**11,044,742**	**$95**	**$1,046.3**

Note: Represents gaming activity originating in the defined Petersburg market area only. Does not represent statewide gaming activity.
Source: The Innovation Group; WPV=Casino Win per Visit; NGR=Net Gaming Revenue

The following table shows the Net Gaming Revenue forecast by Virginia casino and market area for Scenario 1 in thousands of dollars.

Table 32: NGR 2028 Results by Property and Market Area (000s), Scenario 1

	Bristol	Danville	Norfolk	Portsmouth	Petersburg	Richmond
1. Primary Petersburg	$6	$34	$919	$1,101	$30,451	$0
2. Richmond	$6	$269	$7,264	$8,028	$75,757	$0
3. New Kent	$0	$1	$690	$782	$1,562	$0
4. Newport News	$3	$11	$22,589	$27,482	$9,700	$0
5. Secondary East	$0	$1	$2,295	$3,009	$1,680	$0
6. Portsmouth	$1	$3	$29,588	$49,043	$2,035	$0
7. Norfolk	$2	$6	$118,537	$62,526	$3,395	$0
8. Secondary Southeast	$0	$1	$866	$1,232	$618	$0
9. Secondary South	$0	$10	$362	$455	$1,528	$0
10. South Hill	$0	$493	$352	$402	$1,602	$0
11. Secondary West	$1	$388	$292	$328	$2,013	$0
12. Outer Richmond	$2	$97	$1,763	$1,918	$8,564	$0
13. Outer Northeast	$0	$1	$470	$511	$769	$0
14. Outer North	$6	$20	$38	$40	$10,035	$0
15. Charlottesville	$394	$3,335	$111	$118	$3,108	$0
16. Outer West	$721	$9,690	$14	$15	$4,662	$0
17. Outer Southwest	$226	$3,323	$8	$9	$2,631	$0
18. Durham-Raleigh	$5,320	$35,945	$1,512	$1,659	$16,379	$0
19. North NC	$9	$601	$859	$990	$2,462	$0
20. Rocky Mount	$42	$1,985	$2,565	$2,729	$9,618	$0
21. Northeast NC	$1	$40	$5,981	$5,813	$1,674	$0
Gravity Model subtotal	***$6,742***	***$56,254***	***$197,076***	***$168,191***	***$190,242***	***$0***
Out-of-Market	$138,709	$181,919	$12,690	$11,997	$13,317	$0
Total NGR	**$145,451**	**$238,173**	**$209,766**	**$180,188**	**$203,558**	**$0**

Note: "Gravity Model subtotal" represents NGR produced by visitors from the defined Petersburg market area to the properties in each column. Out-of-Market represents NGR produced by visitors from outside of the Petersburg market area. Total NGR represents the total statewide NGR for each property.
Source: The Innovation Group; NGR=Net Gaming Revenue.

We would note that The Innovation Group's demand and revenue forecast for Petersburg (and subsequent scenarios) assumes the most efficient use of capital given the expected competitive environment and associated customer amenities. To demonstrate the potential for a range of project outcomes, following the Cash Flow section below we calculate market potential and ROI for this scenario under an array of assumptions regarding the capital budget.

Scenario 2: Richmond Only

The addition of a casino in Richmond would be expected to lead to increases in propensity and frequency in the Richmond market area. WPV, however, tends to decrease with increased participation rates as more casual gamers enter the market and gaming budgets are stretched over more frequent visits.

The following table shows the inputs and total market results of the Scenario 2 forecast:

Table 33: Total Market Gravity Model Forecast 2028, Scenario 2

	Gamer Pop.	Propensity	Frequency	MPI	Gaming Visits	WPV	NGR ($MMs)
1. Primary Petersburg	123,366	27.7%	9.3	98	313,970	$84	$26.5
2. Richmond	787,242	30.0%	10.7	105	2,649,850	$94	$248.1
3. New Kent	33,771	26.0%	9.2	103	83,169	$95	$7.9
4. Newport News	417,584	30.0%	10.7	105	1,408,634	$89	$124.8
5. Secondary East	44,957	26.8%	8.4	96	96,529	$94	$9.1
6. Portsmouth	258,703	30.5%	11.1	107	943,184	$90	$85.3
7. Norfolk	605,614	30.6%	11.2	104	2,163,922	$88	$191.4
8. Secondary Southeast	17,238	26.8%	8.4	102	39,459	$85	$3.4
9. Secondary South	25,007	30.5%	11.1	75	63,695	$77	$4.9
10. South Hill	28,525	26.1%	7.9	88	51,652	$82	$4.2
11. Secondary West	26,614	24.6%	7.0	82	37,487	$86	$3.2
12. Outer Richmond	136,261	26.2%	8.0	103	296,134	$104	$30.7
13. Outer Northeast	53,731	18.7%	4.6	91	41,560	$95	$4.0
14. Outer North	629,119	27.8%	9.1	107	1,704,003	$107	$182.2
15. Charlottesville	321,017	12.3%	4.1	98	157,409	$103	$16.2
16. Outer West	181,709	22.2%	5.6	93	211,707	$88	$18.7
17. Outer Southwest	86,155	20.9%	4.9	90	79,522	$89	$7.1
18. Durham-Raleigh	1,259,955	17.4%	3.3	101	743,062	$109	$81.1
19. North NC	53,813	25.4%	8.3	98	111,092	$79	$8.8
20. Rocky Mount	362,873	17.4%	3.3	93	192,762	$92	$17.7
21. Northeast NC	128,879	22.9%	6.0	90	159,024	$90	$14.3
Total	**5,582,135**				**11,547,826**	**$94**	**$1,089.4**

Note: Represents gaming activity originating in the defined Petersburg market area only. Does not represent statewide gaming activity.
Source: The Innovation Group; WPV=Casino Win per Visit; NGR=Net Gaming Revenue

The following table shows the Net Gaming Revenue forecast by Virginia casino and market area for Scenario 2 in thousands of dollars.

Table 34: NGR 2028 Results by Property and Market Area (000s), Scenario 2

	Bristol	Danville	Norfolk	Portsmouth	Petersburg	Richmond
1. Primary Petersburg	$9	$52	$1,403	$1,680	$0	$21,537
2. Richmond	$4	$179	$4,702	$5,205	$0	$163,308
3. New Kent	$0	$1	$636	$720	$0	$2,488
4. Newport News	$3	$10	$21,616	$26,318	$0	$14,147
5. Secondary East	$0	$1	$2,437	$3,195	$0	$1,231
6. Portsmouth	$1	$3	$29,732	$49,253	$0	$1,653
7. Norfolk	$2	$6	$118,557	$62,549	$0	$3,351
8. Secondary Southeast	$0	$1	$924	$1,315	$0	$430
9. Secondary South	$0	$12	$441	$553	$0	$1,044
10. South Hill	$1	$661	$481	$550	$0	$1,500
11. Secondary West	$1	$408	$311	$350	$0	$1,950
12. Outer Richmond	$2	$102	$1,830	$1,989	$0	$16,184
13. Outer Northeast	$0	$1	$448	$487	$0	$1,165
14. Outer North	$6	$19	$36	$38	$0	$15,412
15. Charlottesville	$364	$3,092	$102	$108	$0	$4,451
16. Outer West	$720	$9,723	$14	$15	$0	$4,648
17. Outer Southwest	$247	$3,550	$9	$10	$0	$2,305
18. Durham-Raleigh	$5,485	$37,024	$1,561	$1,712	$0	$14,407
19. North NC	$10	$652	$932	$1,074	$0	$1,912
20. Rocky Mount	$45	$2,108	$2,728	$2,907	$0	$8,317
21. Northeast NC	$1	$41	$6,092	$5,930	$0	$1,421
Gravity Model subtotal	***$6,900***	***$57,647***	***$194,989***	***$165,958***	***$0***	***$282,862***
Out-of-Market	$138,709	$181,009	$11,421	$10,797	$0	$16,972
Total NGR	**$145,609**	**$238,656**	**$206,410**	**$176,756**	**$0**	**$299,833**

Note: "Gravity Model subtotal" represents NGR produced by visitors from the defined Petersburg market area to the properties in each column. Out-of-Market represents NGR produced by visitors from outside of the Petersburg market area. Total NGR represents the total statewide NGR for each property.
Source: The Innovation Group; NGR=Net Gaming Revenue.

Scenario 3: Petersburg and Richmond

The addition of casinos in Petersburg and Richmond would be expected to lead to increases in propensity and frequency in the respective market areas. WPV, however, tends to decrease with increased participation rates as more casual gamers enter the market and gaming budgets are stretched over more frequent visits.

The following table shows the inputs and total market results of the Scenario 3 forecast:

Table 35: Total Market Gravity Model Forecast 2028, Scenario 3

	Gamer Pop.	Propensity	Frequency	MPI	Gaming Visits	WPV	NGR ($MMs)
1. Primary Petersburg	123,366	30.7%	11.3	98	420,075	$81	$33.9
2. Richmond	787,242	30.6%	11.1	105	2,816,592	$93	$260.8
3. New Kent	33,771	28.1%	10.0	103	97,091	$94	$9.1
4. Newport News	417,584	30.0%	10.7	105	1,408,634	$89	$124.8
5. Secondary East	44,957	26.8%	8.4	96	96,529	$94	$9.1
6. Portsmouth	258,703	30.5%	11.1	107	943,184	$90	$85.3
7. Norfolk	605,614	30.6%	11.2	104	2,163,922	$88	$191.4
8. Secondary Southeast	17,238	26.8%	8.4	102	39,459	$85	$3.4
9. Secondary South	25,007	30.5%	11.1	75	63,695	$77	$4.9
10. South Hill	28,525	26.1%	7.9	88	51,652	$82	$4.2
11. Secondary West	26,614	24.6%	7.0	82	37,487	$86	$3.2
12. Outer Richmond	136,261	26.2%	8.0	103	296,134	$104	$30.7
13. Outer Northeast	53,731	20.2%	4.9	91	48,517	$95	$4.6
14. Outer North	629,119	27.8%	9.1	107	1,704,003	$107	$182.2
15. Charlottesville	321,017	12.3%	4.4	98	170,074	$103	$17.4
16. Outer West	181,709	22.2%	5.6	93	211,707	$88	$18.7
17. Outer Southwest	86,155	20.9%	4.9	90	79,522	$89	$7.1
18. Durham-Raleigh	1,259,955	17.4%	3.3	101	743,062	$109	$81.1
19. North NC	53,813	25.4%	8.3	98	111,092	$79	$8.8
20. Rocky Mount	362,873	17.5%	3.4	93	201,126	$92	$18.4
21. Northeast NC	128,879	22.9%	6.0	90	159,024	$90	$14.3
Total	**5,582,135**				**11,862,581**	**$94**	**$1,113.4**

Note: Represents gaming activity originating in the defined Petersburg market area only. Does not represent statewide gaming activity.
Source: The Innovation Group; WPV=Casino Win per Visit; NGR=Net Gaming Revenue

The following table shows the Net Gaming Revenue forecast by Virginia casino and market area for Scenario 3 in thousands of dollars.

Table 36: NGR 2028 Results by Property and Market Area (000s), Scenario 3

	Bristol	Danville	Norfolk	Portsmouth	Petersburg	Richmond
1. Primary Petersburg	$4	$25	$690	$827	$22,170	$9,177
2. Richmond	$4	$165	$4,347	$4,806	$39,049	$141,612
3. New Kent	$0	$1	$618	$700	$1,323	$2,414
4. Newport News	$3	$9	$20,191	$24,611	$7,826	$12,827
5. Secondary East	$0	$1	$2,097	$2,751	$1,373	$936
6. Portsmouth	$1	$3	$29,028	$48,263	$1,882	$1,598
7. Norfolk	$2	$6	$116,705	$61,454	$3,156	$3,278
8. Secondary Southeast	$0	$1	$784	$1,117	$525	$358
9. Secondary South	$0	$8	$307	$386	$1,212	$657
10. South Hill	$0	$445	$323	$369	$1,390	$999
11. Secondary West	$0	$250	$188	$211	$1,241	$1,204
12. Outer Richmond	$2	$79	$1,449	$1,573	$6,465	$12,601
13. Outer Northeast	$0	$1	$441	$479	$678	$1,146
14. Outer North	$6	$18	$33	$35	$8,318	$14,246
15. Charlottesville	$339	$2,875	$94	$99	$2,464	$4,081
16. Outer West	$590	$8,087	$11	$12	$3,445	$3,588
17. Outer Southwest	$178	$2,708	$6	$7	$1,899	$1,587
18. Durham-Raleigh	$4,576	$31,050	$1,297	$1,422	$13,336	$11,966
19. North NC	$8	$500	$724	$834	$1,969	$1,479
20. Rocky Mount	$30	$1,424	$1,842	$1,959	$6,531	$5,568
21. Northeast NC	$1	$36	$5,519	$5,348	$1,434	$1,249
Gravity Model subtotal	***$5,743***	***$47,693***	***$186,692***	***$157,264***	***$127,688***	***$232,572***
Out-of-Market	$138,709	$180,104	$11,306	$10,689	$12,651	$16,123
Total NGR	**$144,452**	**$227,797**	**$197,998**	**$167,953**	**$140,339**	**$248,696**

Note: "Gravity Model subtotal" represents NGR produced by visitors from the defined Petersburg market area to the properties in each column. Out-of-Market represents NGR produced by visitors from outside of the Petersburg market area. Total NGR represents the total statewide NGR for each property.
Source: The Innovation Group; NGR=Net Gaming Revenue.

Summary NGR and Gaming Tax Results

Casino gaming revenue in Virginia is estimated to increase by 18% from the addition of a casino in Petersburg, by 29% from the addition of a casino in Richmond, and by 36% from the addition of casinos in Petersburg and Richmond. The gravity modeling projects that the largest market overlap and impact would fall on Rivers Portsmouth, followed by HeadWaters Norfolk, and Caesars Danville. Hard Rock Bristol lies far from either Petersburg or Richmond and thus the market overlap is very small.

As shown in the following table, no casino is projected to reach the $400 million threshold for the top tax bracket of 30%.

Table 37: VA Casino Total NGR Results 2028

$000s	Petersburg	Richmond	HeadWaters	Rivers Portsmouth	Caesars Virginia	Hard Rock Bristol	VA Casino Total
0. Baseline	$0	$0	$226,449	$198,552	$255,966	$147,378	$828,344
Scenario 1	$203,558	$0	$209,766	$180,188	$238,173	$145,451	$977,136
Scenario 2	$0	$299,833	$206,410	$176,756	$238,656	$145,609	$1,067,264
Scenario 3	$140,339	$248,696	$197,998	$167,953	$227,797	$144,452	$1,127,236
$ Change							
Scenario 1			-$16,683	-$18,364	-$17,793	-$1,927	$148,791
Scenario 2			-$20,038	-$21,796	-$17,310	-$1,769	$238,920
Scenario 3			-$28,450	-$30,599	-$28,169	-$2,926	$298,891
% Change							
Scenario 1			-7.4%	-9.2%	-7.0%	-1.3%	18.0%
Scenario 2			-8.8%	-11.0%	-6.8%	-1.2%	28.8%
Scenario 3			-12.6%	-15.4%	-11.0%	-2.0%	36.1%

Source: The Innovation Group

For the purpose of calculating the net impacts to state and local taxes, we have also assessed the NGR impacts to the Commonwealth's HHR facilities. The following table summarizes the gravity model results for the HHR facilities. In total, HHR revenue is projected to decline by between $46 million and $104 million. The Rosie's facility in Richmond is projected to experience the heaviest impact, followed by Colonial Downs. The Rosie's facility in Hampton would have already been heavily impacted by the casinos in Norfolk and Portsmouth.

Table 38: VA HHR Gravity Model NGR 2028 by Scenario

$000s	Colonial Downs	Rosie's Richmond	Hampton	Dumfries	Collinsville	Vinton	Emporia	Total
0. Baseline	$42,201	$119,838	$68,495	$118,608	$180	$4,124	$11,144	$364,589
Scenario 1	$32,277	$97,779	$64,468	$112,101	$126	$3,239	$8,402	$318,392
Scenario 2	$25,188	$66,172	$62,967	$109,131	$129	$3,167	$8,729	$275,484
Scenario 3	$22,993	$62,535	$60,208	$104,689	$103	$2,719	$6,856	$260,104
Impact								
Scenario 1	-$9,923	-$22,059	-$4,027	-$6,507	-$54	-$885	-$2,743	-$46,198
Scenario 2	-$17,012	-$53,666	-$5,528	-$9,477	-$51	-$957	-$2,415	-$89,105
Scenario 3	-$19,208	-$57,303	-$8,286	-$13,919	-$76	-$1,405	-$4,288	-$104,485

Source: The Innovation Group

Table 39 shows the gaming tax implications by scenario. Casino net gaming revenue (NGR) is subject to the following calendar-year tax schedule:

- 18% on the first $200 million of NGR
- 23% on NGR above $200 million to $400 million
- 30% on NGR above $400 million

As noted, no casino is projected to reach the $400 million threshold for the top tax bracket of 30%.

The casino gaming tax is distributed as follows:

- Local designees receive 6% of NGR
- The Problem Gambling Treatment and Support Fund receives 0.8% of the total tax
- The Family and Children's Trust Fund receives 0.2% of the total tax
- The remainder reverts to the state

HHR wagering is taxed on handle (total wagering before prize payouts), with the state receiving a commission of 0.75% of handle and the local designee 0.5% for a total of 1.25%. The HHR hold percentage typically averages 8.7%, resulting in an effective tax rate on revenue of 14.4%.

Petersburg is estimated to lead to a net gain of total gaming taxes of $18.6 million in Scenario 1 and $5.2 million in Scenario 3.

Table 39: VA Gaming Tax Results 2028

$000s	Potential Casinos	4 Authorized Casinos	Less Impact on HHR Commissions	Total Net	Net Gain from Petersburg
Local					
0. Baseline	$0	$49,701	$0	$49,701	
Scenario 1	$12,214	$46,415	-$2,655	$55,973	$6,272
Scenario 2	$17,990	$46,046	-$5,121	$58,915	
Scenario 3	$23,342	$44,292	-$6,005	$61,629	$2,714
PG & Family/Children					
0. Baseline	$0	$1,532	$0	$1,532	
Scenario 1	$368	$1,416	$0	$1,785	$252
Scenario 2	$590	$1,404	$0	$1,994	
Scenario 3	$725	$1,343	$0	$2,067	$74
Remainder of State Share					
0. Baseline	$0	$101,990	$0	$101,990	
Scenario 1	$24,237	$93,810	-$3,983	$114,064	$12,074
Scenario 2	$40,382	$92,941	-$7,681	$125,642	
Scenario 3	$48,394	$88,631	-$9,007	$128,018	$2,377
Total					
0. Baseline	$0	$153,223	$0	$153,223	
Scenario 1	$36,818	$141,641	-$6,638	$171,822	$18,599
Scenario 2	$58,962	$140,391	-$12,802	$186,550	
Scenario 3	$72,461	$134,266	-$15,012	$191,715	$5,165

Source: The Innovation Group

PETERSBURG RETURN-ON-INVESTMENT (ROI) ANALYSIS

A high-level ROI analysis was conducted for Petersburg to identify the different levels of capital investment that would be viable under the two scenarios. The Return-on-Investment analysis utilized a discounted cash flow analysis (DCF), which uses unlevered cash flow (a company's cash flow before interest payments). A DCF analysis adjusts for the time value of money in estimating the value of an investment. NPV (net present value) is a comparison of a dollar today to a projected value for the same dollar at some point in the future or the past.

Operating Proformas

The first step in the ROI process was to complete operating pro formas for each scenario. The operating pro formas were developed utilizing the Innovation Group's proprietary operating model and is based upon operating characteristics of comparable properties in the region. It also takes into consideration existing and assumed future market dynamics and the major assumptions addressed in previous sections of this report. It is a dynamic model built on a foundation of staffing and expense estimates relative to facility size and business volume, whereby changes to the facility or business volume flow through the model to estimate how variable expenses will be affected. The outputs of the operating model include Employment and Employee Compensation (wages, salaries, tips, taxes and benefits), gaming taxes, other casino expenses, and Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA)

Revenues

Gaming revenue projections are detailed in the assessment sections earlier in this report. In addition to slot and table game revenue in the Gaming Market Assessment, we have included Sports Betting revenue in the proforma at approximately 1.5% of AGR as experienced in comparable jurisdictions (i.e., where mobile sports betting is also permitted).

Hotel and food and beverage revenues are based on a program build-up in the proforma model and penetration of the visitor base. Entertainment revenue is estimated as a percentage of gaming revenue and retail & other (ATM fees) revenue as a penetration of the visitor base.

Promotional Allowances

Promotional Allowances (commonly referred as "comps") represent the retail value of complimentary offerings of hotel rooms, food, and beverage to casino patrons. Comps are used as an effective marketing tool to promote gaming activities and to increase the overall appeal of an integrated resort.

Gaming Taxes

The gaming tax structure for slot and table net revenue in Virginia is as follows (on a calendar-year tax schedule):

- 18% on the first $200 million of NGR
- 23% on AGR above $200 million to $400 million
- 30% on AGR above $400 million

Sports betting revenue is taxed by at a flat rate of 15%.

Departmental Expenses

All departmental expenses include payroll, payroll-related taxes and benefits (T&B) costs, and pertinent necessary expenses to operate each area. In recognition of staffing challenges and rising wages post-COVID reopening, an escalation of wages and salaries has been applied.

Casino Operations

The casino departmental expenses include payroll, payroll-related taxes and benefits, maintenance supplies, training, and other operating supplies for the operation of machines and tables games, including cage operations. Labor costs assume that providing excellent customer service is a part of the resort operating philosophy and positioning. Consequently, staffing levels reflect mid to high coverage on the floor in the areas of operations and redemption.

Also included are slot participation fees for popular leased games, and the federal excise tax on sports betting, which is effectively 3.5% of revenue.

Hotel Operation Departments

The Hotel expenses cover payroll, payroll T&B, and related operating supplies and property maintenance for the operation of the hotel, including front desk, housekeeping, public area display, energy, other back-of house-operations, and overall hotel administration.

Food and Beverage Operations

Food and beverage expenses cover restaurants, bars, and casino service and includes all expenses to operate the venues including cost of goods sold (COGS), labor (and labor-related T&B), supplies, and other pertinent operating expenses.

Entertainment

Entertainment expenses include labor and production costs, talent cost and cost of concession goods sold, supplies and equipment.

Retail & Other

These expenses include labor costs, cost of goods sold, supplies and equipment, and bank charges.

Marketing

Marketing expenses include all costs to staff the marketing department for the property, as well as all advertising media and production costs. Other costs in the area include special events and on-site entertainment expenses, bus marketing, direct mail printing and postage, outside agency fees, on property signage, and supplies for various marketing and advertising programs.

General & Administrative

General & administrative expenses include all administrative salaries and wages and were based upon an analysis of estimated positions and wage rates. Included in this figure are the executive management team and support staff, purchasing, finance and accounting, human resources, information systems, and warehouse operations. The department also includes expenses such as general operating supplies, travel and entertainment, outside audit fees, insurance costs, miscellaneous professional and other fees, and property taxes.

Property Operations

Property operations expenses are based upon estimates for maintaining and repairing the resort and related grounds. These expenses also include the costs of cleaning the resort on a daily basis, as well as an allocation for maintenance services typically not handled in-house, such as elevator and escalator services. This figure assumes that the management team would have an ongoing capital expenditure policy to reserve sufficient funds for capital expenditure items. Furthermore, this category includes all utilities, outside contract work, equipment rental, and other expenses of the nature.

Security/Surveillance

These expenses include labor costs, cost of goods sold, supplies and equipment, and any other items required in typical operations of the kind.

Results

Below are the five-year pro forma operating statements for the two scenarios.

Table 40: Petersburg Operating Proforma Scenario 1

(in 000's)	2027	2028	2029	2030	2031
REVENUES:					
Table Revenues	$38,269	$40,712	$41,933	$42,981	$44,056
Slot Revenues	$153,076	$162,847	$167,732	$171,925	$176,224
Sports Betting	$2,847	$3,018	$3,093	$3,171	$3,250
Gross Gaming Revenues	**$194,192**	**$206,576**	**$212,758**	**$218,077**	**$223,529**
Hotel	$8,336	$9,751	$10,231	$10,600	$10,982
Food and Beverage	$19,944	$20,742	$21,322	$21,887	$22,467
Entertainment	$1,942	$2,066	$2,128	$2,181	$2,235
Retail & Other	$1,225	$1,295	$1,318	$1,336	$1,353
TOTAL GROSS REVENUES	**$225,639**	**$240,430**	**$247,757**	**$254,081**	**$260,566**
Less: Promotional Allowances	$13,854	$14,955	$15,481	$15,944	$16,421
NET REVENUES	**$211,785**	**$225,475**	**$232,276**	**$238,136**	**$244,145**
GAMING TAX	$34,869	$37,271	$38,687	$39,904	$41,152
DEPARTMENTAL EXPENSES:					
Casino Operations	$35,930	$36,946	$37,776	$38,602	$39,447
Hotel	$5,270	$6,030	$6,287	$6,493	$6,705
Food & Beverage	$18,931	$19,414	$19,848	$20,284	$20,731
Entertainment	$1,910	$2,009	$2,064	$2,112	$2,162
Retail & Other	$483	$505	$511	$516	$520
Marketing	$13,929	$14,622	$15,019	$15,378	$15,745
General and Administration	$10,888	$11,068	$11,251	$11,437	$11,627
Property Operations	$6,939	$7,066	$7,196	$7,328	$7,462
Security/Surveillance	$7,150	$7,303	$7,458	$7,617	$7,780
TOTAL DEPARTMENTAL EXPENSES	**$101,431**	**$104,964**	**$107,411**	**$109,768**	**$112,178**
EBITDA	**$75,485**	**$83,240**	**$86,178**	**$88,464**	**$90,815**
EBITDA % (Gross)	**33.5%**	**34.6%**	**34.8%**	**34.8%**	**34.9%**

Source: The Innovation Group

Table 41: Petersburg Operating Proforma Scenario 3

(in 000's)	2027	2028	2029	2030	2031
REVENUES:					
Table Revenues	$26,384	$28,068	$28,910	$29,633	$30,373
Slot Revenues	$105,535	$112,271	$115,640	$118,531	$121,494
Sports Betting	$1,898	$2,012	$2,062	$2,114	$2,167
Gross Gaming Revenues	**$133,817**	**$142,351**	**$146,612**	**$150,277**	**$154,034**
Hotel	$6,946	$8,126	$8,525	$8,833	$9,151
Food and Beverage	$15,098	$15,685	$16,120	$16,545	$16,981
Entertainment	$1,338	$1,424	$1,466	$1,503	$1,540
Retail & Other	$851	$900	$916	$928	$940
TOTAL GROSS REVENUES	**$158,051**	**$168,485**	**$173,639**	**$178,086**	**$182,647**
Less: Promotional Allowances	$10,734	$11,608	$12,021	$12,383	$12,756
NET REVENUES	**$147,317**	**$156,877**	**$161,618**	**$165,703**	**$169,892**
GAMING TAX	$24,030	$25,563	$26,328	$26,986	$27,661
DEPARTMENTAL EXPENSES:					
Casino Operations	$25,233	$25,935	$26,516	$27,095	$27,686
Hotel	$4,392	$5,025	$5,239	$5,411	$5,588
Food & Beverage	$15,389	$15,772	$16,121	$16,473	$16,833
Entertainment	$1,418	$1,488	$1,528	$1,564	$1,601
Retail & Other	$338	$353	$357	$360	$363
Marketing	$9,934	$10,418	$10,700	$10,954	$11,215
General and Administration	$8,683	$8,833	$8,985	$9,139	$9,297
Property Operations	$5,362	$5,461	$5,561	$5,664	$5,768
Security/Surveillance	$4,999	$5,106	$5,215	$5,326	$5,439
TOTAL DEPARTMENTAL EXPENSES	**$75,747**	**$78,391**	**$80,223**	**$81,986**	**$83,790**
EBITDA	**$47,540**	**$52,923**	**$55,067**	**$56,730**	**$58,440**
EBITDA % (Gross)	**30.1%**	**31.4%**	**31.7%**	**31.9%**	**32.0%**

Source: The Innovation Group

Development Cost Estimates

The following table shows development costs for a building program to accommodate the projected demand potential in Scenario 1. The program includes 1,700 slot machines, 70 table games, a sportsbook, food and beverage venues totaling 600 seats, a 300-room hotel, and a 1,500-seat events center. Construction costs take into account post-pandemic commercial building inflation.

Table 42: Petersburg Development Costs, Scenario 1

	Unit	Unit #	Unit Cost including FFE	Total
Casino FoH	SF	79,776	$720	$57,438,720
Casino BoH	SF	41,484	$300	$12,445,056
Slots for purchase	Machines	1,564	$30,000	$46,920,000
F&B FoH	SF	31,800	$720	$22,896,000
F&B BoH	SF	25,800	$480	$12,384,000
Hotel	Rooms	300	$330,000	$99,000,000
Meeting/Entertainment	Net SF	12,750	$1,553	$19,800,000
Retail	SF	1,500	$480	$720,000
Parking Garage	Stalls	1,108	$24,000	$26,592,000
Parking Surface	Stalls	1,108	$6,000	$6,648,000
Subtotal				***$304,843,776***
Design & Studies				$22,863,283
Site Work & Permits				$15,242,189
Total Development				**$342,949,248**
Land, Pre-Opening & Other Costs				$22,185,461
Total Capital				**$365,134,709**

Source: The Innovation Group

The following table shows the breakdown between hard construction and FF&E costs.

Table 43: Construction/FF&E Breakdown, Scenario 1

Construction	FF&E
$209,691,610	$95,152,166

Source: The Innovation Group

The Scenario 3 program includes 1,300 slot machines, 55 table games, a sportsbook, food and beverage venues totaling 555 seats, a 250-room hotel, and a 1,500-seat events center.

Table 44: Petersburg Development Costs, Scenario 3

	Unit	Unit #	Unit Cost including FFE	Total
Casino FoH	SF	60,984	$720	$43,908,480
Casino BoH	SF	31,712	$300	$9,513,504
Slots for purchase	Machines	1,196	$30,000	$35,880,000
F&B FoH	SF	29,415	$720	$21,178,800
F&B BoH	SF	23,865	$480	$11,455,200
Hotel	Rooms	250	$330,000	$82,500,000
Meeting/Entertainment	Net SF	12,750	$1,553	$19,800,000
Retail	SF	1,500	$480	$720,000
Parking Garage	Stalls	847	$24,000	$20,328,000
Parking Surface	Stalls	847	$6,000	$5,082,000
Subtotal				***$250,365,984***
Design & Studies				$18,777,449
Site Work & Permits				$12,518,299
Total Development				**$281,661,732**
Land, Pre-Opening & Other Costs				$21,501,683
Total Capital				**$303,163,415**

Source: The Innovation Group

The following table shows the breakdown between hard construction and FF&E costs.

Table 45: Construction/FF&E Breakdown, Scenario 3

Construction	FF&E
$172,598,486	$77,767,498

Source: The Innovation Group

Cash Flow Analysis

To adjust for the time value of money, a discounted cash flow analysis (DCF) analysis utilizes a Weighted Average Cost of Capital (WACC) or discount rate. Companies and projects are financed by a combination of debt and equity. There is a cost of using this capital, so investors and companies try to earn returns in excess of this cost. This cost—the WACC—corresponds to the weighted average cost, expressed as a percentage, of the various means of financing (loans, equity, etc.) available to fund an investment project. A higher WACC or discount rate results in a lower NPV.

The first step in identifying cash flow is to arrive at a figure for EBIT (Earnings before Interest and Taxes). We began with the EBITDA for the five forecasted years and applied a growth rate of 1.5% through Year 10. EBIT was calculated subtracting the following from EBITDA:

- Depreciation[3] as calculated from building cost, FF&E, and maintenance cap ex;
- Amortization[4].

Next, EBIT is adjusted to derive Unlevered Cash Flow, which is calculated as follows:

EBIT:
Less: Unlevered Taxes (at 27%)[5]
Plus: Depreciation
Less: Maintenance Capex
Unlevered Cash Flow

Construction costs, including fixtures, furnishings, and equipment (FF&E) were estimated on a square-foot and per-unit basis. Building costs were depreciated over 20 years; FF&E costs were depreciated over seven years. Other development costs were included in the ROI analysis, including architectural and engineering, permits and site work, land costs, regulatory application fee, working capital, and pre-opening costs.

The analysis also includes an allowance for maintenance capital expenditures. This reflects the need, which grows greater as a property ages and experiences wear and tear, to replace FF&E and in general maintain the facility. Maintenance capex is typically calculated as a percentage of total revenues; in the present analysis a capex allowance of 0.5% is applied to incremental revenue in year two, gradually rising to 3.5% by year six.

Unlevered cash flow through Year Ten was then applied to the DCF analysis. In addition, standard methodology is to assess a terminal value to reflect the value the property would continue to have beyond the forecast period. We utilized the Gordon Model: Value equals to Cash Flow divided by Discount Rate (k) minus a long-term or perpetual Growth Rate (g), "V=CF/(k-g)". Terminal CF is calculated as Year Ten cash flow times 1+g. The value for "g" (the perpetual growth rate) has been set at 1.5%.

The following table shows the results of the DCF analysis for Petersburg in Scenario 1:

[3] Depreciation is the deduction over a specific period of time (usually over the asset's life) of the consumption of the value of tangible assets, including in this case the building cost and furnishings, fixtures and equipment.
[4] Amortization is the deduction over a specific period of time (usually over the asset's life) of the consumption of the value of an intangible asset, such as a patent or a copyright. It was not utilized in this analysis.
[5] Federal plus Virginia state corporate income tax

Table 46: NPV Cash Flow Results: Petersburg Scenario 1 ($MM)

Year>	Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven	Year Eight	Year Nine	Year Ten	Terminal	*Total*
EBITDA	75.5	83.2	86.2	88.5	90.8	92.6	94.5	96.4	98.3	100.3		
EBIT	51.4	59.0	61.9	64.0	66.1	67.6	69.5	84.9	86.8	88.8		
Less: Unlevered Taxes	(13.9)	(15.9)	(16.7)	(17.3)	(17.8)	(18.3)	(18.8)	(22.9)	(23.4)	(24.0)		
Plus: Depreciation	24.1	24.2	24.3	24.5	24.7	25.0	25.0	11.5	11.5	11.5		
Less: Maintenance Capex	0.0	(1.2)	(2.5)	(3.8)	(6.5)	(9.3)	(9.5)	(9.7)	(9.9)	(10.1)		
Unlevered Cash Flow	**61.6**	**66.1**	**67.0**	**67.4**	**66.5**	**65.1**	**66.2**	**63.8**	**65.0**	**66.2**	**611.1**	
NPV factor	88.9%	79.0%	70.2%	62.4%	55.5%	49.3%	43.8%	39.0%	34.6%	30.8%		
NPV of Cash Flow	**54.76**	**52.22**	**47.06**	**42.06**	**36.88**	**32.10**	**29.04**	**24.85**	**22.51**	**20.39**	**188.19**	***550.07***

Source: The Innovation Group

The following table shows the results of the DCF analysis for Petersburg in Scenario 3:

Table 47: NPV Cash Flow Results: Petersburg Scenario 3 ($MM)

Year>	Year One	Year Two	Year Three	Year Four	Year Five	Year Six	Year Seven	Year Eight	Year Nine	Year Ten	Terminal	*Total*
EBITDA	47.5	52.9	55.1	56.7	58.4	59.6	60.8	62.0	63.3	64.5		
EBIT	27.8	33.1	35.2	36.7	38.2	39.2	40.4	52.7	53.9	55.2		
Less: Unlevered Taxes	(7.5)	(8.9)	(9.5)	(9.9)	(10.3)	(10.6)	(10.9)	(14.2)	(14.6)	(14.9)		
Plus: Depreciation	19.7	19.8	19.9	20.0	20.2	20.4	20.4	9.3	9.3	9.3		
Less: Maintenance Capex	0.0	(0.8)	(1.7)	(2.7)	(4.6)	(6.5)	(6.7)	(6.8)	(6.9)	(7.1)		
Unlevered Cash Flow	**40.0**	**43.1**	**43.8**	**44.1**	**43.5**	**42.5**	**43.2**	**41.0**	**41.8**	**42.6**	**392.8**	
NPV factor	88.9%	79.0%	70.2%	62.4%	55.5%	49.3%	43.8%	39.0%	34.6%	30.8%		
NPV of Cash Flow	**35.59**	**34.09**	**30.79**	**27.56**	**24.17**	**20.96**	**18.96**	**15.98**	**14.47**	**13.11**	**120.95**	***356.62***

Source: The Innovation Group

Enterprise value (EV) includes the value of debt, which would need to be paid by a willing buyer. Therefore, the development costs need to be subtracted from EV to determine residual equity value (or ***net*** present value), which represents the fair market value in a DCF valuation. In other words, the NPV line represents the present value of cash flows, minus the cost of development or capital outlay. A positive NPV value indicates a project is generally worth pursuing.

Table 48: Petersburg ROI Results ($MM)

	Scenario 1	Scenario 3
Discount Rate	12.50%	12.50%
Perpetual Growth Rate	1.50%	1.50%
Enterprise Value (Present Value of Cash Flows)	$550.1	$356.6
Less: Project Debt & Equity	($365.1)	($303.2)
Net Present Value (NPV) of Project*	$184.9	$53.5
Cash-on-Cash Return in Year 5	18.2%	14.4%

Source: The Innovation Group; *Also known as Residual Equity Value

The cash-on-cash return is commonly used as a basis for determining the return rate of a real estate investment or transaction. This calculation determines the cash income on the cash invested. The Innovation Group calculated the cash-on-cash return rate for the project by utilizing the capital outlay as the denominator, and a numerator taken from Year 5 unlevered cash flow.

Cash-on-cash expectations can vary by company, and in the gaming industry they can fluctuate with economic conditions and investment returns available elsewhere. From the mid-1990s but prior to the Great Recession, when there was dramatic growth in the gaming industry, investor expectations ranged from 20 to more than 25 percent. In the immediate aftermath of the recession, expectations tempered, and returns dropped to the 10 to 15 percent range as gaming revenue in established jurisdictions remained relatively flat into 2014. As normative growth has resumed in the industry, return expectations have started to rise again, into the 15 to 20 percent range.

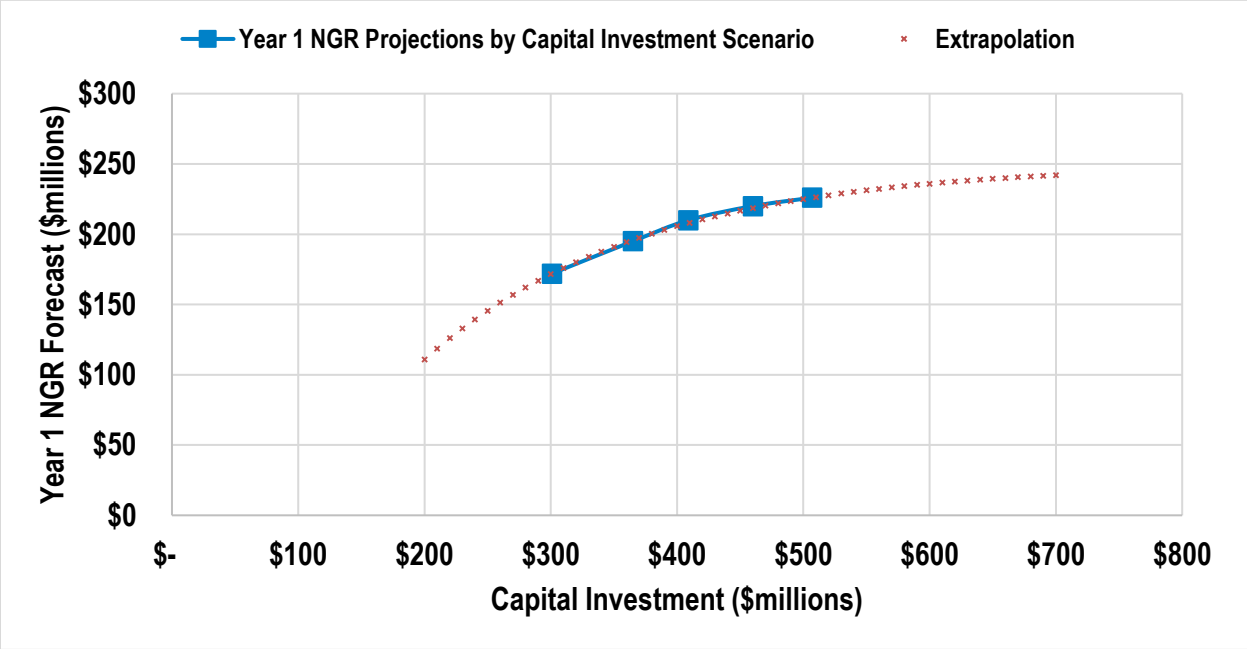
Gaming Revenue Sensitivity

The Innovation Group's demand and revenue forecast for Petersburg assumes the most efficient use of capital given the expected competitive environment and typical customer amenities. In Scenario 1 above, annual gaming revenue for Petersburg is forecasted to be $194 million growing to $224 million in year 5 and is supported by a $365 million capital budget. The cash-on-cash ROI is projected at 18.2%, assuming a 12.5% cost of capital.

As the latest entrant in the emerging Virginia market, a developer with a lower cost of capital or a particularly optimistic view of the market may choose to build a more competitive facility, especially under Scenario 1 where the property would primarily serve the Richmond market. To evaluate revenue potential under different capital budgets, The Innovation Group has calculated Scenario 1 on a continuum, pictured in the graph below, where revenue is forecasted based on a series of capital budgets ranging from $300 - $500 million.

As the below graph demonstrates, there is a diminishing return in revenue from increasing capital; or in other words, the revenue "lift" from spending more capital is not limitless. However, should a developer choose to put more capital at risk and develop a more substantial property, then based on our calculations net gaming revenue could exceed $250 million by Year 5. The ROI for such a project will, of course, depend on the developer's cost of capital.

Figure 2: Gaming Revenue Sensitivity



Employment

The following table shows the FTE (full-time-equivalent) staffing positions and projected average 2027 compensation from payroll (salaries/wages, benefits, and payroll taxes) resulting from the pro forma staffing model for the Petersburg casino in Scenarios 1 and 3. Tips are not included in the table below. For the Employment Compensation estimates in the Economic Impact section later in this report, estimates of tips have been applied. Dealer tips (known as toke rates in the industry) can vary between locations, but toke rates are generally substantial. In the Economic Impact analysis, we conservatively estimate dealer tips at twice the hourly rate but note that many properties see tip rates three times the hourly wage or higher. For food and beverage (F&B) tips, we have conservatively utilized a rate of 12.5% of F&B revenue.

Table 49: Petersburg Employment and Average Compensation 2027

	FTEs Scenario 1	FTEs Scenario 3	Average Compensation
Executive	7	7	$323,378
Managerial/Supervisory	239	178	$94,099
Administrative	13	13	$47,367
Accounting & Other Professional	20	20	$86,827
Technical/Mechanical	49	40	$64,182
Cage/Cashier	65	44	$43,299
Dealers	235	162	$26,905
Line Workers (including F&B)	408	326	$32,604
Security/Surveillance	99	66	$48,685
Housekeeping	148	114	$29,665
Total/Average	**1,283**	**970**	**$48,893**
Average excluding Executive and Managerial/Supervisory			***$36,204***

Source: The Innovation Group

These are based on 2022 salaries and wages estimated **in the industry**, accounting for post-pandemic increases in labor costs, with five years of annual growth applied. **These are not adjusted for the Petersburg area's cost of living.**

For the purposes of the Economic Impact Analysis later in the report, FTEs are translated into total employees (including full and part-time workers) according to an IMPLAN conversion matrix for the gaming industry of approximately 0.82 FTE per employee. Employee-to-gaming-position ratios in commercial casinos range from 0.3 employees per gaming position in slot-only facilities to 0.8 employees per gaming position in casino resorts with hotels. Table gaming is especially labor intensive.

PETERSBURG ECONOMIC IMPACT ANALYSIS

The following section details our Economic Impact Analysis. The impacts are assessed on a gross basis for the city of Petersburg ("Host Region) and a net basis for the Commonwealth (net of impacts on competing Virginia casinos and HHR facilities).

Methodology

The economic benefits—the revenues, jobs, and earnings—that accrue from the annual operations of an enterprise are termed ***ongoing*** impacts. The construction phase of a project is considered a ***one-time*** benefit to an area. This refers to the fact that these dollars will be introduced into the economy only during construction; construction impacts are expressed in single-year equivalence to be consistent in presentation with ongoing annual impacts.

The economic impact of an industry consists of three layers of impacts:

4. Direct effects
5. Indirect effects
6. Induced effects

The **direct effect** is the economic activity that occurs within the industry itself. The direct effect for casino operations represents the expenditures made by the facility in the form of employee compensation and purchases of goods and services (direct expenditures), which ultimately derive from patron spending on the casino floor, and patron spending on non-gaming amenities is an additional direct effect.

Indirect effects are the impact of the direct expenditures on other business sectors: for example, the advertising firm who handles a casino's local media marketing. Indirect effects reflect the economic spin-off that is made possible by the direct purchases of a casino. Firms providing goods and services to a casino have incomes partially attributable to the casino.

Finally, the **induced effects** result from the spending of labor income: for example, casino employees using their income to purchase consumer goods locally. As household incomes are affected by direct employment and spending, this money is recirculated through the household spending patterns causing further local economic activity.

The **total** economic impact of an industry is the sum of the three components.

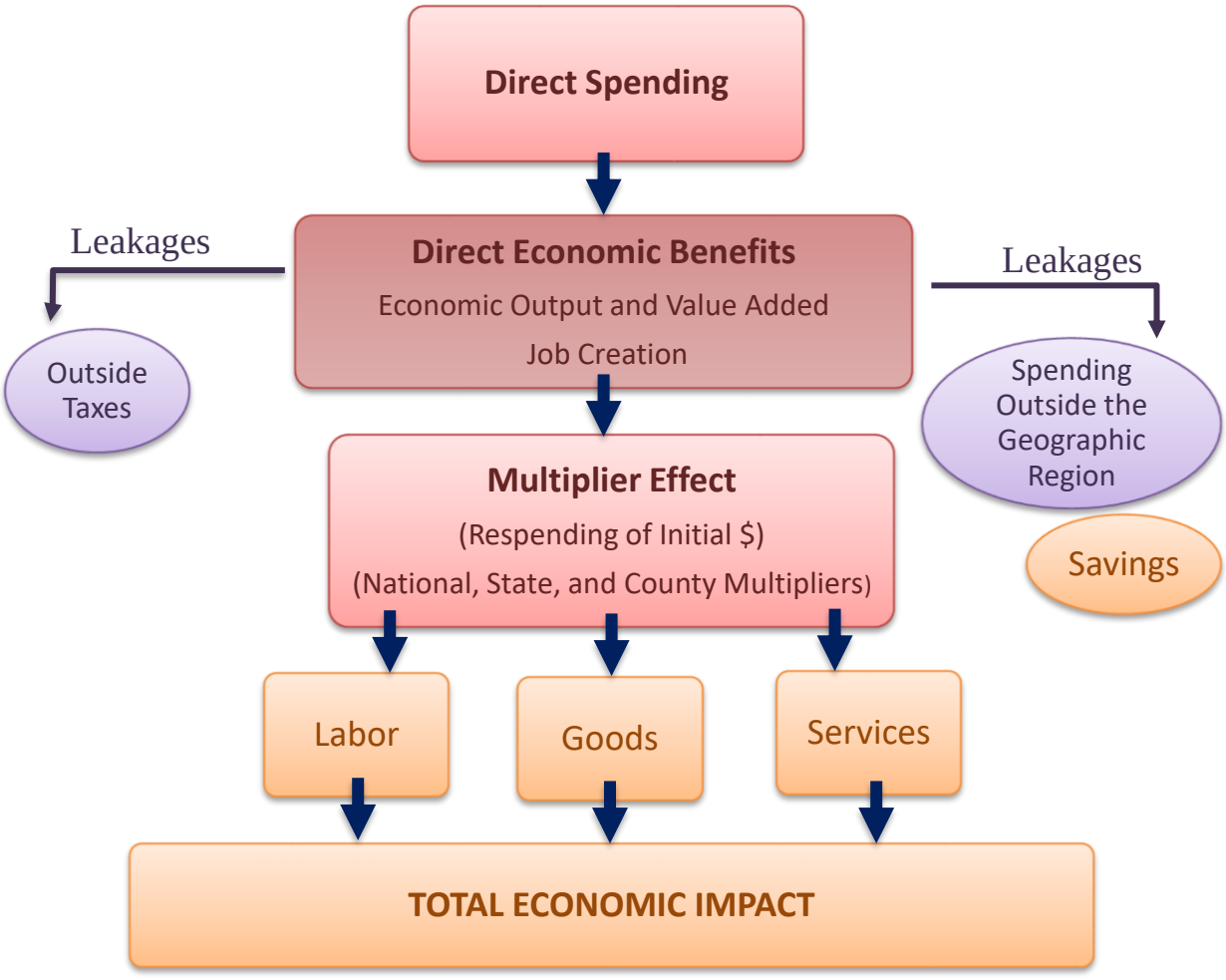
Determining the direct economic impact is a critical first step in conducting a valid economic impact analysis. Once the direct expenditures are identified, the indirect and induced effects are calculated using multipliers derived from an input-output model[6] of the economy. The IMPLAN

[6] IMPLAN Online software and data were utilized for this study.

input-output model identifies the relationships between various industries. The model is then used to estimate the effects of expenditures by one industry on other industries so that the total impact can be determined. Industry multipliers are developed based on U.S. Census data. IMPLAN accounts closely follow the accounting conventions used in the "Input-Output Study of the U.S. Economy" by the Bureau of Economic Analysis.

The following flow-chart shows how the economic impact model operates.

Figure 3: Economic Impact Flow Chart



The IMPLAN analysis expresses impacts (direct, indirect, and induced) for the following four economic variables:

> **Employment** is measured in IMPLAN and by the U.S. Census as headcount, in other words the number of full and part-time workers supported by an economic activity.

Labor Income (LI) is compensation to all workers both employees and owners in terms of wages and salaries as well as benefits and payroll taxes. Profits from self-employed businesses can also be included in this category as compensation to the owner. These are known as employment compensation (EC) and proprietor income (PI) in IMPLAN. *LI = EC + PI*

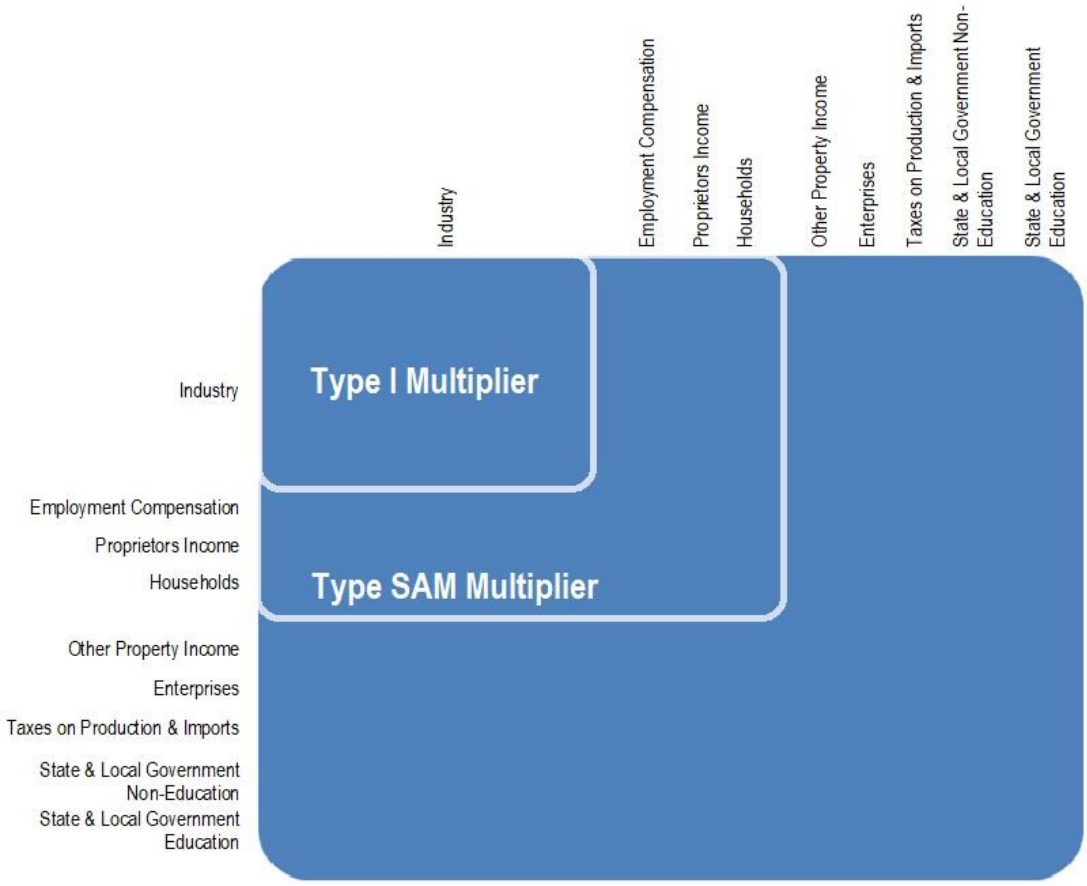
Value-Added (VA) measures the industry or event's contribution to Gross Domestic Product (GDP). It consists of labor income (as described above), taxes on production and imports (TOPI), and other property income (OPI, such as corporate profits, rent payments, and royalties). It is the difference between a business or industry's total sales and the cost of all input materials or intermediate expenditures. *VA = LI + TOPI + OPI*

Output is the total value of industry production; it consists of value-added plus intermediate expenditures (IE). Output is frequently the total price paid by consumers for a good or service. *Output = VA + IE*

Value-Added is the most appropriate measure of economic impact because it excludes intermediate inputs, which are the goods and services (including energy, raw materials, semi-finished goods, and services purchased from all sources) used in the production process to produce ***other*** goods or services rather than for ***final*** consumption. For example, the paper stock used in a magazine publication is an intermediate input whereas paper stock sold in an office-supply store is the final product sold to the consumer. The value of producing the magazine's paper stock is accounted for in measures of GDP within the Paper Manufacturing sector, not in the Publishing sector.

However, an industry's use of intermediate inputs produces multiplier or ripple effects in a local or regional economy. Multipliers are not applied to other property income (OPI) and taxes on production and imports (TOPI) since they do not stimulate any additional impacts that can be attributed to the study area. Figure 4 illustrates the IMPLAN multiplier system.

Figure 4: IMPLAN Modeling Components



The U.S. Bureau of Economic Analysis divides effects into Type I (indirect) and Type II (induced) multipliers. Type I measures only business-to-business purchases, or Intermediate Expenditures. Type II measures the effects of local Household spending and Labor Income. SAM (social accounting matrix) multipliers in the IMPLAN systems measure the combined indirect and induced effects.

The IMPLAN sectoring scheme is based on the 6-digit North American Industry Classification System (NAICS), developed under the auspices of the Office of Management and Budget (OMB), which classifies business establishments based on the activities they are primarily engaged in or the commodities they create. IMPLAN's current sectoring scheme aggregates the 2017 version of the NAICS classification scheme down to just 536 industry sectors. When an industry and the commodity produced by the industry have the same name, the commodity is considered the primary product of that industry and will share the same sector code. Other commodities produced by that industry are considered secondary products of that industry. Therefore, it is possible for more than one industry to produce a specific good or service.

Economic Impact Modeling Options

There are six types of economic activity that IMPLAN is designed to model: Industry Change, Commodity Change, Labor Income, Household Income, Industry Spending Pattern, and Institutional (government) Spending Patterns.

The most commonly used activity is an Industry Change, as the business generating a change in revenue, labor, or employment is often known and attributable to a specific industry sector. When using the Industry Change function, the direct effect values (generally revenue or sales) are entered into IMPLAN using the appropriate sector and IMPLAN calculates the multiplier effects resulting from that direct spending. Industry Change is the most appropriate function for non-gaming amenity operations. Industry Change is also the most appropriate function for modeling the costs associated with land improvements, building, and design related costs.

A Commodity Change distributes the total demand or sales for the good or service as an industry change across all producing industries or institutions, based on their regional market share distribution of that commodity. It is the most appropriate function for modeling costs associated with purchases of Furniture, Fixtures and Equipment (FF&E) in the construction section.

Analysis-by-Parts for Gaming-Related Operating Impacts

Given the unique operating attributes of the casino industry, we utilized an Analysis-by-Parts (ABP) methodology for casino operations. ABP differs from the traditional Industry Change Activity, as it separates out the multiplier effects into individual impact components, Intermediate Expenditure (indirect impacts from Type I multipliers) and Labor Income (induced impacts from Type II multipliers). This allows for more flexibility and customization capabilities in the analysis to model actual business operations.

For the Labor Income (LI) component we used a Labor Income Change activity to analyze the impact of the payroll of casino operations necessary to meet the demand or production level. The direct input for Labor Income in the casino analysis consisted of Employee Compensation from our operating pro forma models.

For Intermediate Expenditures (IE), we import an Industry Spending Pattern to specify the goods and services of industry purchases needed for the sector 503 - Gambling industries (except casino hotels) in order to satisfy projected casino revenues. The purchase of these goods and services from local sources actually represents the first round of indirect purchases by the casino industry. The coefficients listed in an Industry Spending Pattern represent the amount spent on each commodity to produce one dollar of the industry's output, while the sum of all commodity coefficients equals total intermediate expenditures used by that industry sector.

The Analysis-by-Parts method results in a much more conservative and we believe realistic estimate of the indirect and induced (or multiplier) effects of the operation of the casino component. The inputs into the IMPLAN casino model consist solely of the proforma estimates of employee compensation and purchases by the casino of goods and services. Operating profit is excluded from the multiplier effect, although it is included in the displays of direct effects. Since

the ABP technique shifts the direct inputs to indirect and induced impact results, the direct effects of these components are imputed using our proforma operating statements.

Customized Data

Since the casino industry in Virginia is nascent, the IMPLAN sector 503 (Gambling industries except casino hotels) data available for Virginia does not reflect casino gambling. Therefore, we have customized the sector 503 Virginia data to reflect states that have well-established casino industries. As shown in Table 50, the standard data from IMPLAN for sector 503 at the state level showed Other Property Income (OPI) at approximately 19%, significantly lower than would be expected of a state with casino resort operations. Using comparable states within the mid-Atlantic region as a reference, we customized the OPI ratio to 35% of the total output per worker ratio in the modeling.

Table 50: Customized Data IMPLAN Industry Sector 503 - Virginia State

	Standard Model		Customized Model	
Industry Ratio	**Value**	**%**	**Value**	**%**
Employment Compensation (EC)	$25,989	23%	$25,989	23%
Proprietor Income (PI)	$5,169	5%	$5,169	5%
Other Property Income (OPI)	$20,884	19%	$38,951	35%
Tax on Production & Imports (TOPI)	$9,188	8%	$9,188	8%
Value Added	***$61,230***	***55%***	***$79,297***	***71%***
Intermediate Expenditures (IE)	$50,060	45%	$31,992	29%
Output per worker	$111,289		$111,289	

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

The customization of IMPLAN sector 503 has the effect of decreasing the model's multipliers for that industry, since more of the output is shifted from Intermediate Expenditures into Other Property Income (OPI). Multipliers are not applied to OPI in an economic impact analysis since it does not stimulate any additional impacts that can be attributed to the study area. For example, corporate profits from a casino operation may accrue to a company based in another state, effectively a leakage from the model. In other words, by shifting more Output to OPI, more of the Output is effectively leaked out of state, and the multiplier effect is reduced.

Table 51 shows the change in output multipliers for the Virginia state model resulting from this customization. To illustrate, an increase in direct effect of $1,000,000 would produce a total effect of $1,750,000 in the standard model, compared to $1,560,000 in the customized model.

Table 51: Output Multipliers for IMPLAN Industry Sector 503 – Virginia State

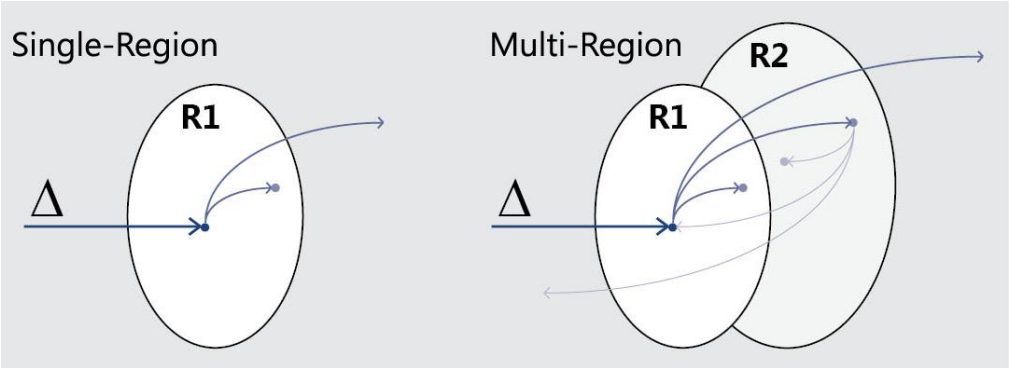
Multiplier	Standard Model	Customized Model
Type I	0.43	0.28
Type II	0.32	0.28
Total (SAM)	1.75	1.56

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

The customized Analysis-by-Parts method results in a much more conservative and we believe realistic estimate of the indirect and induced (or multiplier) effects of the operation of the casino component. The inputs into the IMPLAN casino model consist solely of the proforma estimates of employee compensation and purchases by the casino of goods and services. Operating profit and gaming taxes are excluded from the multiplier effect, although they are included in the displays of direct effects.

Multi-Regional Analysis

Since the analysis estimates the impacts on a local and statewide level, we relied upon the multi-regional input-output (MRIO) analysis method available in the IMPLAN Online software. In this process, we enter the direct spending associated with the construction and operation of the facility into a study area model. Then, the study area or regional model is linked to a model of all remaining jurisdictions within the state. This allows our analysis to capture impacts from purchases and employment that would have otherwise occurred outside the study area but within Virginia. This allows our analysis to capture impacts from purchases and employment that would have otherwise occurred outside the study area but within Virginia. IMPLAN models estimate the additional impact using existing trade flow patterns and data on each industry's supply chain, identifying linkages between industries from one region to another.



Our analysis of these linked models yields direct, indirect, and induced effects for the study area, as well as indirect and induced effects for the balance of the state; direct effects occur *only* in the study area as all purchases and employment associated with construction, employment, and operations occur there. The multi-regional analysis thus results in impacts for the study area ("Host Region" or the city of Petersburg) and the rest of Virginia (termed "Rest of State" in the table headings in this report).

A Note on Substitution

Casino development frequently elicits concern that a substitution of consumer spending (the substitution effect) will negatively impact local businesses, especially smaller "mom and pop" retail, restaurant, and other entertainment industries. Intuitively it seems to be logical that spending at a casino would be diverted from other consumer activities such as going to a movie or taking a trip to the beach. However, numerous empirical studies have failed to find any conclusive evidence of significant economic substitution after the introduction of new casinos, nor is there any conclusive evidence as to the amount of spending that is substituted or the industry that it would have otherwise been spent in.

It is likely that countervailing positive effects dilute or outweigh any substitution that occurs. First, there is the increased household income in the area from casino employment. Secondly, there is a substantial body of research and case studies demonstrating the positive impacts that casinos have on surrounding local businesses. A review of studies of casino impacts on local business shows that casinos can stimulate local economies, resulting in communitywide growth, including in the local food and beverage business and retail businesses. Casino visitors stop at local retail outlets and restaurants in addition to some overnight casino guests patronizing local non-casino hotels.

Since these off-property impacts were not included in this economic impact analysis, it was determined after careful consideration that any substitution effects that may occur in the state as a result of legalized gaming operations would not be modeled in the economic impact analysis.

For total statewide impacts from ongoing operations, we applied substitution effects to account for the impact of Petersburg on other Virginia casinos and HHR facilities. As shown in the following table, 52% of Petersburg NGR is estimated to represent new gaming revenue to the state in Scenario 1 and 33% in Scenario 3.

Table 52: Petersburg "New" NGR Analysis

	Scenario 1	Scenario 3
VA Market Growth	$73,214,440	$23,911,432
Diversion of Out-of-State Casinos	$19,968,286	$11,877,628
Net Out-of-Market Capture	$12,153,383	$10,675,252
Total New VA NGR	$105,336,110	$46,464,311
% of Total	**51.7%**	**33.1%**

Source: The Innovation Group

Ongoing Operations

A casino in Petersburg would result result in ongoing economic benefits that will accrue annually. As discussed, the gaming operations were modeled using an Analysis-by-Parts technique from operating expenditures including labor income and cost of goods (COGS). Projected F&B, hotel

and other revenues at the casino were modeled using an industry change. The direct inputs for each of these components were derived from The Innovation Group's gaming market assessment and proforma analysis.

Operating Inputs

To analyze the annual impact generated by direct operations of the facility we used Year 2 (2028), the first year of stabilized operations.

Casino Operations

Direct effect inputs for casino operations account for the workers employed at the facility and the compensation they earn as well as the purchases of goods and services. Staffing and employment compensation estimates were based on The Innovation Group's operating pro forma model and input into the IMPLAN software. Our staffing model has been calibrated to actual operating data from existing casinos and is on a Full-Time Equivalent ("FTE") basis. These FTEs were converted into total number of employees (Full and Part-time) using IMPLAN's conversion matrix, which for the casino sector is 0.82136 FTEs for each employee on a headcount basis.

Table 53: Petersburg Casino Direct Effect Inputs

Scenario 1			
Industry Spending Pattern & Labor Change	**Expenditures**	**Employment**	**Labor Income**
503 Gambling industries (except casino hotels)	$32,270.5		
5001 Employment Compensation		1,064	$59,415.9
Industry Change	**Revenue**	**Employment**	**Labor Income**
507 Hotels and motels, including casino hotels	$9,751.0	128	$3,450.5
509 Full-service restaurants	$24,103.0	369	$12,243.4
Scenario 3			
Industry Spending Pattern & Labor Change	**Expenditures**	**Employment**	**Labor Income**
495 Gambling industries (except casino hotels)	$22,492.3		
5001 Employment Compensation		757	$43,438.4
Industry Change	**Revenue**	**Employment**	**Labor Income**
507 Hotels and motels, including casino hotels	$8,125.8	107	$3,006.5
509 Full-service restaurants	$18,008.3	317	$10,357.9

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group.

Annual Economic Impacts from Operations

Assumptions

The results in the following section represent total impacts (direct, indirect and induced) of ongoing operations using the multi-regional analysis (MRIO).

All impacts are on an annual basis reflecting Year 2 stabilized operations, or 2028.

Results

The following tables show the total or gross economic impact of the Petersburg casino on the local area and statewide.

Table 54: Casino Operating Gross Impacts ($MMs) – Petersburg Scenario 1

	Employment	Labor Income	Value Added	Output
Host Region Impact				
Direct Effect	1,561	$75.1	$148.2	$192.2
Indirect Effect	167	$7.0	$11.8	$24.2
Induced Effect	26	$0.9	$2.1	$3.7
Total	**1,754**	**$83.0**	**$162.2**	**$220.1**
Rest of State Impact				
Direct Effect	-	-	-	-
Indirect Effect	23	$1.6	$2.7	$5.1
Induced Effect	78	$4.3	$8.4	$14.2
Total	**101**	**$5.9**	**$11.2**	**$19.3**
Total Statewide Impact				
Direct Effect	1,561	$75.1	$148.2	$192.2
Indirect Effect	190	$8.6	$14.6	$29.3
Induced Effect	103	$5.3	$10.6	$17.8
Total	**1,854**	**$89.0**	**$173.3**	**$239.4**

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

Table 55: Casino Operating Gross Impacts ($MMs) – Petersburg Scenario 3

	Employment	Labor Income	Value Added	Output
Host Region Impact				
Direct Effect	1,181	$56.8	$104.3	$134.4
Indirect Effect	120	$5.0	$8.5	$17.4
Induced Effect	21	$0.8	$1.7	$3.0
Total	**1,321**	**$62.6**	**$114.5**	**$154.7**
Rest of State Impact				
Direct Effect	-	-	-	-
Indirect Effect	17	$1.2	$2.0	$3.8
Induced Effect	58	$3.3	$6.4	$10.7
Total	**76**	**$4.5**	**$8.4**	**$14.5**
Total Statewide Impact				
Direct Effect	1,181	$56.8	$104.3	$134.4
Indirect Effect	137	$6.2	$10.5	$21.2
Induced Effect	79	$4.0	$8.1	$13.6
Total	**1,397**	**$67.0**	**$122.9**	**$169.2**

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

The following tables show the net statewide economic impact of the Petersburg casino, factoring in the impacts on the four authorized casinos, as well as on the potential Richmond casino in Scenario 3.

Table 56: Casino Operating Net Impacts ($MMs) – Petersburg Scenario 1

	Employment	Labor Income	Value Added	Output
Total Statewide Impact				
Direct Effect	808	$38.9	$76.7	$99.5
Indirect Effect	98	$4.4	$7.5	$15.2
Induced Effect	53	$2.7	$5.5	$9.2
Total	**960**	**$46.0**	**$89.7**	**$123.9**

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

Table 57: Casino Operating Net Impacts ($MMs) – Petersburg Scenario 3

	Employment	Labor Income	Value Added	Output
Total Statewide Impact				
Direct Effect	391	$18.8	$34.5	$44.5
Indirect Effect	45	$2.1	$3.5	$7.0
Induced Effect	26	$1.3	$2.7	$4.5
Total	**463**	**$22.2**	**$40.7**	**$56.0**

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group

Construction

Construction of the proposed gambling facilities would bring one-time (non-recurring) benefits to the Host Region and the rest of the state of Virginia. Construction impacts are expressed on a single-year basis. Therefore, the employment figures, for example, represent person-year equivalents; for a construction period of two years, the actual number of workers onsite would be half the person-year equivalent.

The impact of construction only relates to expenditures made directly by the development company to design, build and outfit the physical structure. For construction and architectural and engineering impacts, the Industry Change function using sector 57-Construction of New Commercial Structures was most appropriate for modeling the costs associated with land improvements and building related costs while sector 457 Architectural, Engineering, and Related Services was most appropriated for modeling architectural and engineering costs. Costs associated with purchases of Furniture, Fixtures and Equipment (FF&E) were modeled using the Commodity Change function sectors 3395-Wholesale Trade Distribution Services and 3394 -All other miscellaneous manufactured products.

Construction Inputs

Based on high-level construction capital costs estimated by the Innovation Group, the following table outlines the final inputs used to calculate the economic impact by sector. The cost of slot machines was separated out from the other FF&E as it is a very specialized product and is not expected to be available within the region. IMPLAN estimates what percentage of the purchases, including slot machines, will originate from within the study area based on its Social Accounting Matrix (SAM).

Table 58: Estimated Construction Cost Inputs – Petersburg ($MM)

Component	Scenario 1	Scenario 3
Industry Change		
57 Construction of New Commercial Structures	$224.9	$185.1
457 Architectural, engineering, and related services	$22.9	$18.8
Commodity Change		
3395 Wholesale trade distribution services	$48.2	$41.9
3394 All other miscellaneous manufactured products	$46.9	$35.9
Total Direct	**$342.9**	**$281.7**

IMPLAN Group, LLC, IMPLAN System; The Innovation Group

Economic Impacts from Construction

The results in the following section represent total impacts (direct, indirect and induced) of construction costs using the multi-regional analysis (MRIO).

Results

There are one-time economic benefits to this region from construction of the proposed casino in Petersburg.

Table 59: Casino Construction Impacts ($MMs) – Petersburg Scenario 1

	Employment	Labor Income	Value Added	Output
Host Region Impact				
Direct Effect	2,393	$128.0	$133.3	$268.1
Indirect Effect	223	$11.3	$21.5	$42.5
Induced Effect	192	$7.6	$15.3	$26.8
Total	**2,808**	**$146.8**	**$170.1**	**$337.4**
Rest of State Impact				
Direct Effect	-	-	-	-
Indirect Effect	94	$6.8	$10.9	$20.0
Induced Effect	433	$23.4	$45.9	$76.9
Total	**527**	**$30.2**	**$56.8**	**$97.0**
Total Statewide Impact				
Direct Effect	2,393	$128.0	$133.3	$268.1
Indirect Effect	317	$18.1	$32.5	$62.5
Induced Effect	625	$31.0	$61.2	$103.7
Total	**3,335**	**$177.1**	**$226.9**	**$434.4**

IMPLAN Group, LLC, IMPLAN System; The Innovation Group

Table 60: Casino Construction Impacts ($MMs) – Petersburg Scenario 3

	Employment	Labor Income	Value Added	Output
Host Region Impact				
Direct Effect	1,969	$105.3	$109.7	$220.6
Indirect Effect	184	$9.3	$17.7	$35.0
Induced Effect	158	$6.2	$12.6	$22.0
Total	**2,311**	**$120.8**	**$140.0**	**$277.6**
Rest of State Impact				
Direct Effect	-	-	-	-
Indirect Effect	77	$5.6	$9.0	$16.5
Induced Effect	356	$19.3	$37.7	$63.3
Total	**434**	**$24.9**	**$46.7**	**$79.8**
Total Statewide Impact				
Direct Effect	1,969	$105.3	$109.7	$220.6
Indirect Effect	261	$14.9	$26.7	$51.4
Induced Effect	514	$25.5	$50.3	$85.3
Total	**2,744**	**$145.7**	**$186.7**	**$357.4**

IMPLAN Group, LLC, IMPLAN System; The Innovation Group

Gaming Taxes

Gaming taxes are detailed previously in the report in Table 37. To summarize, Virginia would be expected to receive $18.6 million in Scenario 1 and $5.2 million in Scenario 3 in state and local taxes from development of a casino in Petersburg, on a net incremental basis.

Table 61: VA Gaming Tax Results 2028

$000s	Potential Casinos	4 Authorized Casinos	Less Impact on HHR Commissions	Total Net	Net Gain from Petersburg
Local					
0. Baseline	$0	$49,701	$0	$49,701	
Scenario 1	$12,214	$46,415	-$2,655	$55,973	$6,272
Scenario 2	$17,990	$46,046	-$5,121	$58,915	
Scenario 3	$23,342	$44,292	-$6,005	$61,629	$2,714
PG & Family/Children					
0. Baseline	$0	$1,532	$0	$1,532	
Scenario 1	$368	$1,416	$0	$1,785	$252
Scenario 2	$590	$1,404	$0	$1,994	
Scenario 3	$725	$1,343	$0	$2,067	$74
Remainder of State Share					
0. Baseline	$0	$101,990	$0	$101,990	
Scenario 1	$24,237	$93,810	-$3,983	$114,064	$12,074
Scenario 2	$40,382	$92,941	-$7,681	$125,642	
Scenario 3	$48,394	$88,631	-$9,007	$128,018	$2,377
Total					
0. Baseline	$0	$153,223	$0	$153,223	
Scenario 1	$36,818	$141,641	-$6,638	$171,822	$18,599
Scenario 2	$58,962	$140,391	-$12,802	$186,550	
Scenario 3	$72,461	$134,266	-$15,012	$191,715	$5,165

Source: The Innovation Group

As noted, the local community would receive 6% of NGR. The following table shows the gaming tax flow to the City of Petersburg from a Petersburg casino.

Table 62: Local Petersburg Gaming Tax Results

	2027	2028	2029	2030	2031
Scenario 1	$11,480,696	$12,213,507	$12,579,912	$12,894,410	$13,216,770
Scenario 3	$7,915,134	$8,420,355	$8,672,966	$8,889,790	$9,112,035

Source: The Innovation Group

The following table shows the gaming tax flow to the City of Richmond from a Richmond casino.

Table 63: Local Richmond Gaming Tax Results

	2027	2028	2029	2030	2031
Scenario 2	$16,910,605	$17,990,006	$18,529,706	$18,992,949	$19,467,772
Scenario 3	$14,026,427	$14,921,731	$15,369,383	$15,753,618	$16,147,458

Source: The Innovation Group

The following table shows the local gaming taxes for the four authorized casinos under each scenario.

Table 64: Local Gaming Tax Results, Four Authorized Casinos

$000s	HeadWaters	Rivers Portsmouth	Caesars Virginia	Hard Rock Bristol
0. Baseline	$13,587	$11,913	$15,358	$8,843
Scenario 1	$12,586	$10,811	$14,290	$8,727
Scenario 2	$12,385	$10,605	$14,319	$8,737
Scenario 3	$11,880	$10,077	$13,668	$8,667
$ Change				
Scenario 1	-$1,001	-$1,102	-$1,068	-$116
Scenario 2	-$1,202	-$1,308	-$1,039	-$106
Scenario 3	-$1,707	-$1,836	-$1,690	-$176
% Change				
Scenario 1	-7.4%	-9.2%	-7.0%	-1.3%
Scenario 2	-8.8%	-11.0%	-6.8%	-1.2%
Scenario 3	-12.6%	-15.4%	-11.0%	-2.0%

Source: The Innovation Group

Property Tax

Legalized gambling in the alternative development scenarios results in property taxes accruing at the local level. To estimate the direct effect on property taxes, local tax rates from the Virginia Department of Taxation were applied to the construction budget. The tax levies by locality are given as rates per $100 of assessed value on real estate, tangible personal property, machinery and tools, and merchants' capital. The real estate rate was applied to the hard construction cost portion

of the budget and the tangible personal property rate was applied to the FF&E portion of the budget.

Table 65: Petersburg Local Property Tax – Direct Effect ($000's)

Scenario 1	Scenario 3
$5,400.0	$4,551.6

Source: The Innovation Group

The indirect and induced effects on property taxes were estimated by the IMPLAN regional models for each of the development scenarios.

Table 66 Petersburg Property Tax - Indirect & Induced Effects ($000's)

Scenario 1	Scenario 3
$1,254.7	$924.2

IMPLAN Group, LLC, IMPLAN System; The Innovation Group

Sales Tax

Legalized gambling in the alternative development scenarios results in sales taxes accruing at the state and local level. To estimate the direct effect, a sales tax rate from the Virginia Department of Taxation was applied to each casino property's non-gaming revenue. The state sales tax rate levied in Virginia is 4.3% while the additional local tax rate in Petersburg is 1.0%.

Table 67: Petersburg Amenity Sales Tax – Direct Effect ($000's)

	Scenario 1	Scenario 3
Local Sales Tax	$338.5	$261.3
State Tax	$1,455.7	$1,123.8

Source: The Innovation Group

The indirect and induced effects on state & local sales taxes were estimated by the IMPLAN regional models for each of the development scenarios.

Table 68: Petersburg Sales Tax - Indirect & Induced Effects ($000's)

	Scenario 1	Scenario 3
Local Sales Tax	$261.0	$192.3
State Tax	$682.9	$503.3

IMPLAN Group, LLC, IMPLAN System; The Innovation Group

Income Tax

Income tax accrues at the state level. The direct, indirect, and induced effects on income taxes were estimated by the IMPLAN regional models for each of the development scenarios.

Table 69: State Income Tax – Total (Direct, Indirect & Induced) Effects ($000's)

Scenario 1	Scenario 3
$388.9	$303.6

IMPLAN Group, LLC, IMPLAN System; The Innovation Group

Corporate Profits Tax

Corporate profits tax accrues at the state level. The indirect and induced effects on corporate profits taxes were estimated by the IMPLAN regional models for each of the development scenarios. No direct effect on corporate profits taxes were estimated or included in the following table.

Table 70: Corporate Profits Tax - Indirect & Induced Effects ($000's)

Scenario 1	Scenario 3
$45.9	$34.1

IMPLAN Group, LLC, IMPLAN System; The Innovation Group

DISCLAIMER

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

Further, statements that include the words "may," "could," "should," "would," "believe," "expect," "anticipate," "estimate," "intend," "plan," "project," or other words or expressions of similar meaning have been utilized. These statements reflect our judgment on the date they are made and we undertake no duty to update such statements in the future.

Although we believe that the expectations in these reports 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 or as a consequence of known or unknown risks and uncertainties and unanticipated events and circumstances, which 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, The Innovation Group accepts no liability in relation to the estimates provided herein.