

250 West 57th Street Suite 432 New York, NY 10107 Phone: 212.779.9797 Fax: 212.779.9809 **Email: cca-ny@verizon.net**

170 Sawyer Road New Gloucester, ME 04260 Phone: 207.688.4500 Fax: 207.926.5612 Email: <u>stsinc@gwi.net</u>

Gaming Study and Economic Impact Analysis

EXECUTIVE SUMMARY

Prepared by: Christiansen Capital Advisors, LLC Prepared for: The Rhode Island Department of Revenue Tuesday, January 17, 2012

Gaming Study and Economic Impact Analysis

Executive Summary

Christiansen Capital Advisors, LLC (CCA) has been retained by the State of Rhode Island Department of Revenue to conduct a study of gaming in Rhode Island, the likely revenue and fiscal impacts of recently authorized gaming in the Commonwealth of Massachusetts, and an analysis of the broader Statewide economic impacts of recently authorized gaming in the Commonwealth of Massachusetts.

In preparing this report CCA compiled pertinent historical data relating to casinos and video lottery terminal (VLT) facilities in New England, including Twin River and Newport Grand, casino gaming in Connecticut and in adjoining States, and constructed models of similar markets in other jurisdictions. On the basis of this work, we provide the following summary of our independent analysis and conclusions.

THE SCENARIOS FOR GAMING IN MASSACHUSETTS

In assessing the impacts of Massachusetts gaming facilities on Rhode Island we considered many possible scenarios based upon the known applicants at the time of this report's drafting. Inevitably, some of these proposed facilities will fall by the wayside, either because the applicants will be unable to obtain local approval or financing or encounter some other impediment to the development they propose. Furthermore, additional applicants may materialize in the coming months.

After consultation with the Rhode Island Department of Revenue and careful review of public proposals for gaming development in Massachusetts we selected three scenarios for the locations of the three casinos and one racino authorized in the Commonwealth. Using these three scenarios we evaluated the best, the worst, and the likely impacts of Massachusetts gaming on Twin River and Newport Grand and on the Rhode Island economy.

- In the best case scenario, Massachusetts gaming facilities are located as follows: three casinos
 are located at Suffolk Downs in East Boston, in New Bedford, and at any one of three locations
 in western Massachusetts and one racino is located at Raynham Park in Raynham.
- In the worst case scenario, Massachusetts gaming facilities are located as follows: three casinos are located in Foxboro, New Bedford, and at any one of three locations in western Massachusetts and one racino is located at Plainridge Racecourse in Plainville.
- In the likely case scenario, Massachusetts gaming facilities are located as follows: three casinos are located at Suffolk Downs in East Boston, in Middleboro, and at any one of three locations in western Massachusetts and one racino is located at Plainridge racecourse in Plainville.

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In all three of the scenarios we examined the advent of casino gaming in Massachusetts has substantial negative impacts on Twin River and Newport Grand. A substantial portion of Rhode Island gambling revenues are contributed by Massachusetts residents, and it is rare for the public to drive by one gambling facility to get to another. The end result of expanded gaming in Massachusetts is that the flow of cars and spending that currently crosses the Rhode Island border on its way to Connecticut or the two Rhode Island VLT-only establishments will stay in Massachusetts.

In assessing the impacts of Massachusetts gaming on the existing Rhode Island VLT facilities, we have relied primarily upon a gravity model analysis. To test the veracity of those models we reviewed experience in other markets with VLT facilities that derived a substantial portion of their gaming revenues from a nearby State, which subsequently authorized gaming. Specifically, we reviewed the impact of Pennsylvania casinos on Wheeling Downs and Mountaineer Park in West Virginia and Delaware Park in northern Delaware.

We assumed in all three scenarios that casino licenses in Massachusetts will not be issued until late 2012 or early 2013, and further that the Commonwealth's first gaming facility to open will be the racino license, in July 2014. We assume that Massachusetts' three casinos will open one year later.

THE FISCAL IMPACT OF MASSACHUSETTS GAMING ON RHODE ISLAND, FY 2011 VS. FY 2017

Exhibit ES.1 summarizes our findings. We project that without the addition of table games at Twin River, Rhode Island gross gaming revenue will decline by \$76.6 million to \$151.9 million by FY 2017 from FY 2011 levels, depending on which scenario for Massachusetts gaming is presumed. The State's share of gross gaming revenue from Twin River and Newport Grand will also decline by \$44.5 million to \$94.1 million by FY 2017 from FY 2011 levels, again depending on which scenario for Massachusetts gaming is presumed (Exhibit ES. 1 first column).

This negative impact will be mitigated, but not overturned, with the addition of table games at Twin River. We project that Rhode Island gross gaming revenue will decrease by \$20.8 million to \$130.9 million by FY 2017 from FY 2011 amounts, depending on which scenario for Massachusetts gaming is utilized. The State's share of gross gaming revenue from Twin River and Newport Grand will also decrease from \$27.6 million to \$84.0 million by FY 2017 from FY 2011 amounts, again depending on which scenario for Massachusetts gaming is utilized (Exhibit ES. 1 second column).

The installation of table games at Twin River yields a net increase in Rhode Island gross gaming revenue of between \$21.0 million and \$55.8 million by FY 2017 relative to the current status quo at Twin River and Newport Grand in the face of competition from Massachusetts, depending on which gaming scenario in Massachusetts is considered. With respect to the State's share of gross gaming revenue at Twin River and Newport Grand, the installation of table games at Twin River results in a net increase of between \$10.1 million and \$16.9 million compared to the current status quo at Twin River and Newport Grand in the face of competition from Massachusetts, again depending on which gaming scenario in Massachusetts is considered (Exhibit ES.1 third column).

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Exhibit ES.1- The Impacts of Gaming in Massachusetts: FY 2017 Projections Compared to FY 2011 Rhode Island Gross Gaming Revenue and the State's Share of GGR

	Without	Tables at Tw	vin River	With 1	ables at Twin	River		Difference	
Change From		FY 2017			FY 2017			FY 2017	
FY 2011 Baseline	Best Case	Worst Case	Likely Case	Best Case	Worst Case	Likely Case	Best Case	Worst Case	Likely Case
Gaming Revenue	-\$76.6	-\$151.9	-\$126.3	-\$20.8	-\$130.9	-\$73.9	\$55.8	\$21.0	\$52.4
State Share of GGR	-\$44.5	-\$94.1	-\$75.2	-\$27.6	-\$84.0	-\$59.2	\$16.9	\$10.1	\$16.0

Source: Christiansen Capital Advisors estimates.

THE FISCAL IMPACT OF GAMING IN MASSACHUSETTS ON RHODE ISLAND, FY 2017

As part of our analysis, CCA constructed projections of Rhode Island gaming revenue and the State's share of that revenue under two *status quo* scenarios. The first of these scenarios assumed that there would be no gaming in Massachusetts and no table games at Twin River. The purpose of this scenario was to set a baseline for assessing the impact of gaming in Massachusetts on Rhode Island's gaming sector if the State made no changes to its gaming offerings. The second of these scenarios assumed that there would be no gaming in Massachusetts but table games would be installed at Twin River. The purpose of this scenario was to set a baseline for assessing the impact of games would be installed at Twin River. The purpose of this scenario was to set a baseline for assessing the impact of gaming the impact of gaming in Massachusetts on Rhode Island's gaming in Massachusetts but table games at Twin River.

Exhibit ES.2 compares CCA's FY 2017 revenue projections with Massachusetts gaming competition, both with and without table games at Twin River, to the FY 2017 *status quo* projections for Rhode Island's gaming sector. We project that, without the addition of table games at Twin River, Rhode Island gross gaming revenue will be between \$176.3 million and \$251.6 million less in FY 2017, depending on which Massachusetts gaming scenario is in place, than it would be if there was no gaming competition from Massachusetts. The State's share of gross gaming revenue from Twin River and Newport Grand will also be less in FY 2017 by \$108.8 million to \$158.4 million, again depending on which Massachusetts gaming scenario is in place, if table games are not allowed at Twin River and there is gaming competition in Massachusetts (Exhibit ES.2 first column).

With table games at Twin River, CCA projects that Rhode Island gross gaming revenue will be between \$120.5 million and \$230.6 million less in FY 2017, depending on the Massachusetts gaming scenario proposed, with gaming competition from Massachusetts than it would have been without Massachusetts gaming competition. The State's share of gross gaming revenue from Twin River and Newport Grand will also be less by \$91.9 million to \$148.3 million in FY 2017, again depending on which Massachusetts gaming scenario is proposed, than it would be if there was no gaming competition in Massachusetts (Exhibit ES.2 second column).

The net result of the installation of table games at Twin River, with gaming competition in Massachusetts, is an increase in Rhode Island gross gaming revenue in FY 2017 of between \$55.8 million and \$21.0 million, depending on the Massachusetts gaming scenario that is analyzed, relative to the impact realized without table games at Twin River. Rhode Island's share of the gross gaming

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revenue from Twin River and Newport Grand also increases in FY 2017 with table games at Twin River and gaming competition in Massachusetts by between \$10.1 million and \$16.9 million, again depending on the Massachusetts gaming scenario analyzed, relative to the impact without table games at Twin River (Exhibit ES.2 third column).

Exhibit ES.2- The Impacts of Games in Massachusetts: FY 2017 Projections with Massachusetts Gaming Compared to FY 2017 *Status Quo* Projections

	Without	Tables at Tw	in River	With 1	ables at Twin	River		Difference	
Change From FY 2017		FY 2017			FY 2017			FY 2017	
Status Quo Projections	Best Case	Worst Case	Likely Case	Best Case	Worst Case	Likely Case	Best Case	Worst Case	Likely Case
Gaming Revenue	-\$176.3	-\$251.6	-\$226.0	-\$120.5	-\$230.6	-\$173.6	\$55.8	\$21.0	\$52.4
State Share of GGR	-\$108.8	-\$158.4	-\$139.5	-\$91.9	-\$148.3	-\$123.5	\$16.9	\$10.1	\$16.0

Source: Christiansen Capital Advisors estimates.

IMPACTS ON RHODE ISLAND'S ECONOMY FROM GAMING IN MASSACHUSETTS

The direct, indirect, and induced economic impacts of adding tables at Twin River have been estimated on the basis of FY 2011 earnings specific to Rhode Island VLT facilities and on the basis of a business profile specific to estimates of gaming facilities in Rhode Island. In total, we estimate that Rhode Island table games will generate meaningful increases in full and part-time jobs statewide , including those employed in various facets of the facility's operations, employment supported by local purchases made by the facilities, and purchases made by those employed at Twin River and Newport Grand..

The job matrix of a gaming facility is distributed among a wide variety of occupations and professions that require many different types and levels of skill. The facility operation requires changers, beverage servers, accountants, personnel managers, floor managers, repair and maintenance technicians, sound and lighting technicians, clerks, and security personnel, among other full and part-time job descriptions. The facility's general administrative services require computer systems analysts, accountants, financial analysts, risk analysts, and other professional managers.

As one would expect, the economic impact of any business (gaming or otherwise) can change over time. Industries that are growing will typically increase spending on intermediate goods and hire more employees, thus the economic impacts will increase over time. The converse is also true. An industry in a state of decline will typically scale back expenditures on intermediate goods and reduce the number of employees, thus the economic impact of that industry will decrease over time. In our case, both will occur. As detailed in the main body of this report, the gaming sector in the State of Rhode Island is about to undergo a sea change. Industry sales (or gross gaming revenue) will increase (as will the associated economic impacts) over the next few years until competition comes on line in Massachusetts (FY 2015 through FY 2016) when gross gaming revenue and the associated economic impacts of this industry in the State of Rhode Island will start to contract.

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Thus, CCA believes that the appropriate way to measure and present the projected changes in the economic impacts of gaming in Rhode Island is by conducting a "before and after" analysis. In other words, we compare the estimated FY 2011 economic impacts of gaming in Rhode Island with the projected economic impacts of gaming in Rhode Island in FY 2017 under the various scenarios for gaming in Massachusetts. Exhibit ES.3 summarizes the changes in the economic impacts of Rhode Island gaming on the Rhode Island economy associated with the introduction of gaming in Massachusetts both with and without table games at Twin River.

We project that, without the addition of table games at Twin River, there will be a negative economic impact on the Rhode Island economy from the introduction of gaming in Massachusetts. In terms of jobs, we estimate that between 193 and 397 full and part-time jobs will be lost by FY 2017, depending on the gaming scenario realized in Massachusetts, relative to the level of employment in FY 2011. The State's total economic output will also be between \$88.3 million to \$175.6 million less in FY 2017, again depending on the choice of Massachusetts gaming scenario, than it was in FY 2011, if table games are not allowed at Twin River (Exhibit ES.3 first column).

Given the labor-intensive nature of table games versus video lottery terminals, the negative economic impact of gaming competition in Massachusetts on Rhode Island's gaming sector will be largely mitigated with the addition of table games at Twin River. CCA projects that with table games at Twin River, Rhode Island employment will range from a loss of 118 jobs to a gain of 365 jobs in FY 2017, depending on the Massachusetts gaming scenario that transpires, relative to employment totals in FY 2011. Total impact on total state output is estimated to vary from a loss of \$137.6 million to a gain of \$2.2 million, again depending on the Massachusetts gaming scenario that results, relative to total state output in FY 2011 (Exhibit ES.3 second column).

Comparing the two Rhode Island gaming scenarios of no table games at Twin River to with table games at Twin River, there is a net gain in employment with the installation of table games at Twin River of between 279 and 558 full and part-time jobs in Rhode Island in FY 2017, depending on the Massachusetts gaming scenario in place. With respect to total state economic output, there is a net increase of between \$38.0 million and \$90.5 million in FY 2017, again depending on the Massachusetts gaming scenario in place, with table games installed at Twin River than if no table games are placed at Twin River (Exhibit ES.3 third column).

	Withou	t Tables at Tw	in River	With	Tables at Twir	n River		Difference		
Change From	<u>FY 2017</u>				<u>FY 2017</u>			<u>FY 2017</u>		
FY 2011 Baseline	Best Case	Worst Case	Likely Case	Best Case	Worst Case	Likely Case	Best Case	Worst Case	Likely Case	
Employment	-193	-397	-319	365	-118	201	558	279	520	
Output (\$ Millions)	-\$88.3	-\$175.6	-\$145.6	\$2.2	-\$137.6	-\$61.1	\$90.5	\$38.0	\$84.6	

Exhibit ES.3- Estimated Changes in the Economic Impacts of the Rhode Island Gaming Sector in FY 2017 with Gaming in Massachusetts

Source: Christiansen Capital Advisors estimates.

THE PRESENT VALUE OF AN IGRA CASINO WITHIN 50 MILES OF TWIN RIVER

CCA was asked to estimate the net present and future value to a Native American tribe of an Indian Gaming Regulatory Act (IGRA) casino located within 50 miles of Twin River based on the near-term passage by Congress of the "*Carcieri* fix" ¹ utilizing best and worst case estimates of the calendar time that would elapse for the United States Department of the Interior to take land into trust for the purpose of an IGRA-authorized casino in Rhode Island.

In order to assess the net present and future value of an IGRA casino located within 50 miles of Twin River, we utilized the models for the likely Massachusetts gaming scenario (Section 2), and identified areas of the State of Rhode Island that are relatively near major traffic arteries and would remain under-served once competition from Massachusetts comes online.

As of the writing of this report, no Federal legislation has been enacted that would alter the *Carcieri* decision. Even assuming the near-term passage of a *Carcieri* "fix," however, the State of Rhode Island is required by law and the terms of a contract with the owners of Twin River to "exhaust all of [the State's] administrative and judicial remedies to oppose the taking or conversion of land in Rhode Island into trust...where such taking or conversion is for the purpose of gaming under IGRA" if the State is to avoid having to pay "slippage protection" to Twin River. ² In July of 2005, the State entered into a contract with UTGR, Inc. (the owners of Twin River prior to the bankruptcy reorganization) ³ that, among other things, instituted a "slippage agreement" ⁴ between UTGR and the State that reduces Rhode Island's share of Twin River's gross gaming revenue in the case that another "gaming facility" including "facilities or venues operated pursuant to IGRA" opens in the State. ⁵

Thus it would appear that in the best case, passage of a Carcieri "fix" in 2012, the timeline for construction of a Rhode Island IGRA casino would proceed roughly as follows: the Narragansett Tribe would again apply to the Secretary of the Interior to take land in Rhode Island into trust. The Secretary would evaluate the Tribe's application over the course of a couple of years. The State would oppose the conversion of land into trust both administratively and in court as required by law. While it is hard to tell how long such a challenge could drag on, the last such challenge by the State lasted 10 years. ⁶ If the Tribe and the Secretary were ultimately successful in taking land into trust, it would be

⁴ *Ibid.* Section 6.

⁵ Ibid.

⁶ In 1997, the Narragansett Tribe requested the Secretary of the Interior to take a 31-acre parcel into trust. The Bureau of Indian Affairs (BIA) notified the State of Rhode Island of its intention to take the parcel into trust in 1998. The State filed an appeal with an administrative appeal arm of the BIA (the IBIA) which affirmed the BIA's decision in 2000. The State then appealed the IBIA's decision to the federal

¹ United States Supreme Court, Carcieri v. Salazar, No. 07-526 (2009).

² 2005 P.L. Ch. 322, section 2.

³ Master Video Lottery Terminal Contract by and between the Division of Lotteries of the Rhode Island Department of Administration and UTGR, Inc. July 18, 2005.

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only the first step. In order to open a casino in the State of Rhode Island, the Narragansett Tribe would have to negotiate a compact for gambling with the State of Rhode Island, which could take an additional three to five years. Assuming that the Narragansett Tribe eventually enters into a gaming compact with the State, another two years would probably elapse before an IGRA casino actually opened in the State of Rhode Island.

Thus, assuming passage of a *Carcieri* "fix" in the next Congress, and the assumptions described above it would appear that the best case estimate of the timing for an IGRA casino to open in Rhode Island is sometime in 2029. The worst case estimate is 2031. Utilizing a projection of gaming revenue for an optimally sited casino and a discounted cash flow analysis based upon the timeline described above we estimate that the present value of an IGRA casino within 50 miles of Twin River is between \$46.3 million under the longest timeline and \$65.5 million under the shortest timeline.

The projections presented herein are based upon the accompanying assumptions. Some of these assumptions will inevitably not materialize, and unanticipated events and circumstances will occur. Actual results may therefore vary from our projections, and such variations may be material.

district court in Rhode Island, which again affirmed the BIA's decision in 2003. The State appealed the district court's decision to the First Circuit court of Appeals in Boston, which issued two decisions again affirming the BIA's decision, one in 2005, and then another (*en banc*) in 2008. The State appealed the First Circuit's ruling to the United States Supreme Court, which issued a decision in favor of the State in 2009. United States Supreme Court, *Carcieri v. Salazar*, No. 07-526 (2009).



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Gaming Study and Economic Impact Analysis

FINAL REPORT

Prepared by: Christiansen Capital Advisors, LLC Prepared for: The Rhode Island Department of Revenue Tuesday, January 17, 2012

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Gaming Study and Economic Impact Analysis

1. Scope of Services

Christiansen Capital Advisors, LLC (CCA) has been retained by the State of Rhode Island Department of Revenue to conduct a study of gaming in Rhode Island, the likely revenue and fiscal impacts of recently authorized gaming in the Commonwealth of Massachusetts, and an analysis of the broader Statewide economic impacts of recently authorized gaming in the Commonwealth of Massachusetts.

Specifically, CCA was tasked with the following:

A. Baseline Scenario

CCA was asked to construct a baseline scenario consisting of a five year projection of Rhode Island gross gaming revenue including net terminal income for Twin River and Newport Grand and an economic impact analysis for the Rhode Island economy, assuming existing market conditions continue during this period (i.e., no gaming in Massachusetts).

B. Competitive Threats Scenarios

CCA was asked to construct competitive threat scenarios consisting of a five-year projection of Rhode Island gross gaming revenue including net terminal income for Twin River and Newport Grand, the implications of gaming in Massachusetts for the successful operation of each facility, and an economic impact analysis for the Rhode Island economy for each of the following:

- 1. Twin River and Newport Grand maintain the *status quo* with respect to their current gaming offerings; Massachusetts issues its category 1 and category 2 casino licenses (see H-3702); and Massachusetts gaming facilities are built and placed into operation pursuant to these licenses.
- 2. Twin River expands its current gaming offerings to include table games while Newport Grand's gaming offerings remain unchanged; Massachusetts issues its category 1 and category 2 casino licenses (see H-3702); and Massachusetts gaming facilities are built and placed into operation pursuant to these licenses.
- C. Twin River Hotel and Convention Facilities Expansion Scenarios

CCA was asked to provide an assessment of five year projections of gross gaming revenue including net terminal income for Twin River and Newport Grand, the implications of gaming in Massachusetts for the successful operation of each facility, and an economic impact analysis for the Rhode Island economy including the impact on Providence's and Newport's leisure and hospitality industries of each of the following:

- 1. Twin River expands its current offerings to include table games and hotel and convention facilities while Newport Grand's offerings remain unchanged, and Massachusetts does not issue its proposed category 1 and category 2 casino licenses.
- 2. Twin River expands its current offerings to include table games and hotel and convention facilities while Newport Grand's current offerings remain unchanged; and Massachusetts issues its category 1 and category 2 casino licenses (see H-3702) and Massachusetts gaming facilities are built and placed into operation pursuant to these licenses.

D. Indian Gaming Regulatory Act (IGRA) Casino Scenario

CCA was asked to estimate the present and future value to a Native American tribe of an Indian Gaming Regulatory Act (IGRA) casino located within 50 miles of Twin River based on the near-term passage by Congress of the "Carcieri fix" ¹ utilizing best and worst case estimates of the calendar time that would elapse for the United States Interior Department to take land into trust for the purpose of an IGRA-authorized casino.

In preparing this report CCA compiled pertinent historical data relating to casinos and video lottery terminal (VLT) facilities in New England, including the Twin River and Newport markets, casino gaming in Connecticut and in adjoining States, and constructed models of similar markets in other jurisdictions. On the basis of this work, we provide the following independent analysis and conclusions.

¹ United States Supreme Court, *Carcieri v. Salazar*, No. 07-526 (2009).

2. Baseline Scenarios

REVENUE ANALYSIS METHODOLOGY

To develop projections for the revenue potential of casinos (and one racino) in Massachusetts, CCA utilized proprietary models it has used in previous studies,² modified to take into account specific Southern New England and surrounding area market conditions, to develop projections for the market potential of expanded gaming in Massachusetts and its impact on Rhode Island.

The model chosen, which is used in many location-based analyses of this kind, is often referred to as a "gravity model," because it is similar to Newton's Law of Gravitation (for which the distance factor would be -2.0: if you double the distance, the attraction declines by a factor of four). This model has been refined by CCA over the years, as it relates to gambling facilities; the technique focuses on the demographics of areas surrounding each facility, in particular the number of adults residing at various distances, and the observed ratio of actual spending on gambling of other similar adult populations.

Our model assesses, and projects, gambling revenues based upon the distribution and characteristics of the adult populations surrounding each facility. The model includes parameters for distance, *per capita* income, urban/rural population mix, the non-resident "visitor" population, and competition. These elements are then weighted and aggregated to generate the resulting projections. In constructing these projections, CCA carries its analysis down to a precise level of detail. CCA models markets in the United States to adult population by zip code, and in Canada by postal FSA. This provides for a much more accurate assessment of geographic distributions of populations than is commonly used in analyses of this kind, which in our experience usually model markets using 10, 25, and 50 mile radii. Carrying the analysis down to the zip code level is particularly important in markets that have several gambling facilities in close proximity.

Another important component of CCA's methodology is the use of a verifiable adult spending base for slot machines and table games. CCA relies on actual, observed experience of casino, riverboat, and/or pari-mutuel device facilities in the market analyzed (if any) and in comparable markets to estimate the consumer demand for a proposed gambling facility and its potential impacts upon other forms of gambling. CCA does not utilize spurious metrics such as unverifiable "propensities to gamble", or, what can be even more misleading, win per unit per day from dissimilar markets or devices. CCA's analyses are based upon observed, verifiable distance-adjusted spending per adult in actual comparable gambling markets, providing a firm support for its projections.

As is described in more detail below, we have applied the experience of existing casinos and video lottery terminal (VLT) facilities in New England and in other comparable markets to estimate the consumer demand for Massachusetts casinos and their impacts upon Rhode Island VLT facilities. To

² CCA has conducted similar studies with accurate results for the Federal National Gambling Impact Study Commission and in Kentucky, Kansas, Pennsylvania, Connecticut, Iowa, Illinois, Massachusetts, Florida, New York, Rhode Island, California, and various other North American markets.

this end, we analyzed the performance of gaming machines and table games at casinos and racetrack gaming facilities in a wide variety of markets, including Pennsylvania, West Virginia, Delaware, Connecticut, and Maryland.

Our projections of casino demand and potential revenues are based on an important observation: other things being equal, gambling patrons overwhelmingly tend to gamble at the facility that is most conveniently located for them. However, and this is particularly important for this project, "convenience" or "attractiveness" is a quality with multiple parameters where gambling is concerned. For example, in a market served by VLTs and full-blown casinos (i.e., facilities that have table games in addition to slot machines or VLTs) such as Florida or Pennsylvania, casinos, with a wider complement of gaming options, are generally more "attractive" than VLT-only properties. Effective player databases and promotions also play a key role in the relative *attractiveness* of competing gambling properties, particularly those in close proximity. The analysis presented in this report, however, does not draw sharp geographical distinctions between markets within Rhode Island. Casino patrons sometimes do visit more distant facilities, particularly if there is a critical mass of casinos or amenities that they cannot get at the nearest facility. But other things being equal, VLTs, and casino machine games generally, are commodities: geographic proximity tends to outweigh other factors in consumer choice among competing suppliers.

Because the public tends to gamble at the facility that is most conveniently located, patronage (and associated spending) at full-service casino gambling facilities falls off with distance, but less rapidly than for many other forms of gambling (and other leisure) spending. For destination land-based casino resorts, we assume (based upon previous research and CCA's experience) a "distance coefficient"³ of - 0.5 for full service casino facilities, compared to values of about -0.8 to -1.0 for VLT-only facilities. In other words, casino patronage rises with increased proximity to a gaming facility, but at differing rates for different types of gaming properties.

Because slot machines and table games are commodities, distance is the predominant determinant of casino patronage (and, hence, we assume, spending). Distance not only determines the overall level of *per capita* expenditures in the marketplace; it weighs heavily in consumer choice among competing suppliers. In general, the evidence from other markets overwhelmingly indicates that consumer expenditures on casino games will flow to the closest supplier to any given market.⁴

In Rhode Island, however, the availability of table games (and possibly many other amenities) in an environment attractive to gamblers in Connecticut and Massachusetts will outweigh the "distance factor" in relation to Rhode Island VLT facilities for some patrons. CCA's models adjust for this.

 $^{^{3}}$ The "distance factors" estimated for these models are, technically, the "elasticities" of spending with respect to distance. Based upon survey data from several jurisdictions, rates of casino visitation appear to decline in proportion to about the 0.5 to 0.6 power of the distance to the casino, yielding distance factors of about 0.5 to 0.6. This is a relatively "long-distance" attraction; if distance is doubled, spending declines by only about 30 percent.

⁴ The most important U.S. exception is Las Vegas. The Las Vegas market is unique both in terms of intensity of development and the variety of attractions it has evolved, which enable it to attract a truly global clientele. Due to this infusion of personal income from other States and countries, and because, to some extent, Nevada residents are a "self-selected population" with a bias towards gambling, Nevada spending ratios are very high. We do not believe that they are representative of any other jurisdiction.

Our models also incorporate adjustments for estimated *per capita* income. We assume that for counties with *per capita* money incomes below \$48,989, the average *per capita* income in New England, casino spending declines with income with an elasticity of 0.5. We do not assume any increase in spending from higher-income counties. Further refinements to our model are made by adjusting for urban/rural mix (urban residents typically spend more), and competition among the various facilities for the non-resident population in Rhode Island during the summer months.

To recapitulate, the models used for the projections in this report adjust the populations surrounding each facility (or proposed facility) for distance, *per capita* income,⁵ the proportion of urban to rural residents (urbanites typically spend more), the non-resident "visitor" population, and competition. From these data we calculate an *adjusted adult population* around each facility, or group of facilities. This measure weights the adults who live closest to a facility at higher values than those who live at greater distances. Total actual or estimated revenues (or consumer spending) in each market is divided by these adjusted population figures to arrive at revenue per "distance adjusted" adult.⁶

BASELINE: THE CURRENT RHODE ISLAND MARKET, FY 2011

The following section presents an overview of the current New England gambling market.

Exhibit 2.1 presents a map of the regional New England market. The locations of the six existing Connecticut, New York City metropolitan area, and Rhode Island gaming facilities are indicated on this map.

⁵ We assume that for counties with *per capita* money incomes below regional averages, resort casino spending declines with income with an elasticity of 0.5.

⁶ As noted above, these populations are adjusted for several other factors as well; however, the most significant variable, in terms of casino spending, is distance. Hence, we refer to these populations as "distance" adjusted.

Exhibit 2.1 – Map of the Current Regional Gaming Market



The Connecticut Casino Industry

By far the largest component of Connecticut's extensive gambling industry is casino gaming. Connecticut's two casinos, located approximately 10 miles apart in the Ledyard/Montville area in the southeastern region of the State, are the largest destination gaming resort attractions north of Atlantic City, more than 270 miles to the south.

The southern Connecticut region and the New York City metropolitan area have historically been an important source of gaming revenue for Foxwoods and Mohegan Sun, Connecticut's two tribal casino resorts. In the New York City metropolitan area Empire Casino/Yonkers Raceway opened in October 2006 with 1,870 VLTs. Currently Empire has 5,378 VLTs. Resorts World Casino/Aqueduct opened its doors in October 2011 and in its initial development stage offers 2,486 VLTs. These facilities, and eastern Pennsylvania resort casinos and racinos (which now offer table games) are cannibalizing Connecticut tribal casinos consumer spending. Sands Bethlehem (3,024 slot machines and 129 table games) and Pocono Mt Airy (2,275 slot machines and 72 table games) have been particularly successful in drawing metropolitan New York City consumers away from Connecticut. Notwithstanding these impacts, Foxwoods Casino and Resort and Mohegan Sun remain among the largest casinos in North America and, for that matter, in the world.

Foxwoods and Mohegan Sun at a Glance

- Foxwoods: 468 tables; 6,400 slot machines; 344,000 square feet of casino floor; 2,241 hotel rooms and \$1.0 billion in estimated gross gaming revenue in 2011;
- Mohegan Sun Casino, 377 table games; 6,400 slot machines; 364,000 square feet of casino floor; 40story, 1,200 room hotel and \$835 million in estimated gross gaming revenue in 2011.

Exhibit 2.2 presents consumer spending (gross gaming revenue) on casino gaming at the two Connecticut tribal facilities between FY 2002 and FY 2011 and includes by-facility reported slot revenue and reported/estimated table revenue (*italics* represent estimates).

Exhibit 2.2- Estimated Connecticut Casino Win (Gross Gaming Revenue in \$ Millions) between FY 2002 and FY 2011

	Mohegan Sun	Mohegan Sun	Foxwoods Slot	Foxwoods	Total Ct. Tribal
FY	Slot GGR	Table GGR	GGR	Table GGR	GGR
2002	\$719.0	\$243.0	\$796.2	\$269.1	\$2,027.2
2003	\$777.0	\$283.0	\$785.2	\$286.0	\$2,131.2
2004	\$833.0	\$306.0	\$787.5	\$289.3	\$2,215.8
2005	\$861.0	\$334.0	\$819.8	\$318.0	\$2,332.8
2006	\$905.0	\$366.0	\$818.0	\$330.8	\$2,419.8
2007	\$922.0	\$386.0	\$805.5	\$337.2	\$2,450.8
2008	\$855.9	\$374.5	\$760.2	\$332.6	\$2,323.1
2009	\$779.6	\$305.9	\$708.6	\$278.0	\$2,072.2
2010	\$746.4	\$296.2	\$652.2	\$258.8	\$1,953.5
2011	\$719.2	\$285.4	\$650.0	\$258.0	\$1,912.6

Source: Connecticut Division of Special Revenue, Mohegan Tribal Gaming Authority Form 10-K FY 2010, FY 2007 and FY2004. Christiansen Capital Advisors estimates.

The Connecticut Division of Special Revenue reports Foxwoods and Mohegan Sun slot gross gaming revenue (GGR). It does not report table GGR. Mohegan Sun reports both its slot and table revenue (using a different fiscal calendar) in that the Mohegan Tribal Gaming Authority has publicly issued debt and reports these statistics in the annual 10-Ks it files with the Securities and Exchange Commission (SEC).

As reported in The Mohegan Tribal Gaming Authority's SEC filings slot revenues accounted for an average of 72.0 percent of total gambling revenues over the past several years. We have assumed that the percentage of total revenues derived from slot machines at Mohegan Sun is roughly the same at Foxwoods. This ratio of table GGR to slot machine GGR is moreover consistent with observed experience in other regional markets. Given that the two Connecticut casinos are serving the same market and their close proximity to each other, it seems unlikely that the disposition of revenues from slot machines versus table games would vary to any great degree between the two facilities. The

resulting statistics for table spending at Mohegan Sun from its 10-Ks and estimates for facility table game revenue at Foxwoods for the years FY 2002-2011 are presented in Exhibit 2.2

As Exhibit 2.2 shows, Connecticut gross gaming revenue increased from approximately \$2.0 billion in FY 2002 to approximately \$2.5 billion in FY 2007. The following year these two facilities experienced a steady decline in year-over-year gross gaming revenue through FY 2011, when it reached an estimated \$1.9 billion.

This four-year decline in GGR can be attributed to the severe 2007-2008 U.S. economic contraction as well as to an increase in the regional gaming supply, especially in eastern Pennsylvania. With the addition of casinos and racinos in Massachusetts, as well as the probable authorization of casino gaming in New Hampshire, Connecticut tribal gaming will feel additional competitive pressure going forward.

Rhode Island VLTs

Video lottery terminals (VLTs) were installed at Rhode Island's two former pari-mutuel facilities, Lincoln Park (now Twin River) and Newport Jai Alai (Newport Grand), late in 1992. Lincoln Park installed 166 video poker terminals on September 28 of that year, and rapidly increased their number over the following months. The types of machines and number of vendors were restricted by the State, however, and the financial results were not as positive as expected. By early 1993, machine revenues were running at an annual rate of about \$16 million. In early 1994, however, reel type video slot machines were first allowed, and machine wins increased substantially.

In July of 2003, the Rhode Island General Assembly passed legislation prohibiting the licensing of jai alai at Newport Jai Alai/Newport Grand.

In July 2005, BLB Investors completed the acquisition of Lincoln Park/Twin River and subsequently completed a reported \$220 million, 18-month renovation in March 2007. ⁷ In June of 2009, Twin River Casino filed for bankruptcy.

Given the proximity of full scale casino competition from Foxwoods and Mohegan Sun in nearby Connecticut, we believe Rhode Island's experience points up the importance of geographic convenience in VLT operations. Though still without reel-spinning slot machines and limited to voucher output (not cash), and moreover constrained by comparatively modest expenditures on capital improvements and marketing, Exhibit 2.3 shows that Lincoln/Twin River and Newport Grand are drawing substantial numbers of machine customers and consumer spending.

Exhibit 2.3 presents the VLT performance of Twin River and Newport Grand for the years FY 2003 – FY 2011. This exhibit shows almost uninterrupted growth at Twin River, with GGR increasing from \$248.6 million in FY 2003 to \$442.4 million in FY 2011. Twin River has benefited from both its proximity to Massachusetts and convenient access, together with increases in the supply of VLTs: from an average of 1,870 in FY 2003 to an average of 4,748 in 2011.

⁷ http://www.waterfordgroup.net/wg/gaming/index.html

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By contrast, Newport Grand has been in steady decline since 2005 when it recorded GGR of \$79.4 million, compared to \$50.2 million in FY 2011. Likewise, its machine productivity as measured by win/unit/day (w/u/d) is significantly lower than Twin River: in FY 2011, Newport Grand w/u/d was \$122.57 vs. Twin River with \$255.28 w/u/d.

This disparity highlights the importance of location relative to population/personal income and competition within the market.

Exhibit 2.3 – Rhode Island VLT Data FY 2003-FY 2011

VLT Net Terminal Income	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	<u>FY 2010</u>	FY 2011
Twin River	\$248.643.793	\$283,316,688	\$319,778,456	\$338,935,939	\$342,024,297	\$406,503,579	\$396,638,141	\$410,461,474	\$442,373,975
Newport Grand	\$66,058,050	\$75,553,113	\$79,408,210	\$77,566,492	\$74,561,320	\$71,170,983	\$64,202,012	\$57,306,666	\$50,220,213
Rhode Island Total	\$314,701,843	\$358,869,801	\$399,186,666	\$416,502,431	\$416,585,617	\$477,674,562	\$460,840,153	\$467,768,140	\$492,594,188
As many $h_{\rm man} = h_{\rm man$									
Average Number of VLTs (FY)	4 070	0.040	0.004	0.005	0.704	1.015	4 744	4 745	4 740
Twin River	1,870	2,348	2,621	3,385	3,794	4,615	4,744	4,745	4,748
Newport Grand	784	1,016	1,021	1,070	1,070	1,096	1,446	1,327	1,123
Rhode Island Total	2,654	3,364	3,642	4,455	4,864	5,711	6,190	6,072	5,870
VLT Win per unit Day									
Twin River	\$364.22	\$330.60	\$334.22	\$274.37	\$247.00	\$241.33	\$229.08	\$237.01	\$255.28
Newport Grand	\$230.99	\$203.72	\$213.19	\$198.61	\$190.91	\$177.96	\$121.65	\$118.32	\$122.57

Source: Rhode Island Lottery

Exhibit 2.4 presents the results of the application of CCA's gravity model to FY 2011 gross gaming revenue at Twin River. We present these results, which are calculated by zip code as described in the methodology section at the beginning of this report, as total per-adult spending on Twin River VLTs by distance range in miles.

Exhibit 2.4 – Twin River Actual Spending Per Adult, Spending by Distance Range

Distance Range	Adult Population	Distance, Income, and Competitive	Spending Base	Actual Spending per Adult	Total Revenues (\$M)
0-10	505,930	62.4%	\$427.6	\$266.7	\$134.9
10-25	744,972	19.8%	\$427.6	84.7	\$63.1
25-50	3,208,931	13.2%	\$427.6	56.3	\$180.8
50-75	2,489,245	3.9%	\$427.6	16.6	\$41.3
75-100	1,494,335	1.5%	\$427.6	6.6	\$9.9
100-125	2,006,953	0.4%	\$427.6	1.6	\$3.2
125-150	6,363,388	0.0%	\$427.6	0.1	\$0.6
Out	t of Market	2.0%			8.7
Total	16,813,754				\$442.4

Source: Christiansen Capital Advisors, LLC

Twin River is fortunate to be located in Providence County, which contains more than half the adult population of the State of Rhode Island. As Exhibit 2.4 shows, Twin River draws upon a population of over half-million adults within a 10-mile radius of the facility. This segment of the market population contributes \$134.9 million of the \$442.4 million in Fiscal Year 2011, as reported by the Rhode Island Lottery.

Utilizing output data from CCA's Demand Gravity Model, estimates of the allocation of consumer spending at Twin River by State can be generated (Exhibit 2.5).

This analysis indicates that 46.1 percent of the VLT net terminal income at Twin River is derived from Rhode Island patrons.

For comparative purposes, we provide estimates for patron origins by State (for 2011) provided by the Center for Policy Analysis (CPA), University of Massachusetts at Dartmouth (Exhibit 2.5).⁸

As Exhibit 2.5 shows, for the two States that account for the vast majority of patrons or consumer spending, Massachusetts and Rhode Island, CCA's findings and the CPA's findings are relatively close, with Massachusetts patrons at 46.8 percent and Massachusetts spending at Twin River at 49.1 percent.

Exhibit 2.5 – Comparison of Estimates for Consumer Spending and Patron Origin by State for Twin River



Source: "New England Gaming Update", Center for Policy Analysis, University of Massachusetts at Dartmouth, 2011. Page iv. Christiansen Capital Advisors estimates.

Exhibit 2.6 presents the results of the application of CCA's gravity model to FY 2011 gross gaming revenue at Newport Grand. We present these results, which are calculated by zip code as described in the methodology section at the beginning of this report, as total per-adult spending on Newport VLTs by distance range in miles.

⁸ Center for Policy Analysis, "New England Update" 2011, Executive Summary, page *iv*.

Distance Range	Adult Population	Distance, Income, and Competitive Factors	Spending Base	Actual Spending per Adult	Total Revenues (\$M)
0-10	81,819	80.3%	\$198.00	\$158.94	\$13.0
10-25	690,496	18.4%	\$198.00	\$36.52	\$25.2
25-50	1,394,503	2.6%	\$198.00	\$5.22	\$7.3
50-75	3,282,845	0.6%	\$198.00	\$1.14	\$3.7
75-100	2,693,109	0.0%	\$198.00	\$0.00	\$0.0
Out of M	arket	2.0%			1.0
Total	8,142,772				\$50.2

Exhibit 2.6- Newport Grand Actual Spending Per Adult, Spending by Distance Range

The Newport facility is not as favorably located as Twin River. Within 10 miles this facility can draw upon an adult population of approximately 82,000, compared to Twin River with an adult population of over half million within the same radius. Thus Newport must attempt to draw its clientele from farther away. We estimate that only \$13.0 million of VLT net terminal income in FY 2011 is derived from the local (10-mile radius) market.

Moreover, Twin River is only four miles from the center of Providence and is easily accessible from Massachusetts via the heavily traveled I-95 and I-295 corridors. To get to Twin River from the north, (south bound on I-95) travelers exit I-95 at I-295 and then exit I-295 onto the Lousquisset Pike (U.S. Route 146) south bound for approximately four miles.

Newport Grand is located on Aquidneck Island, a coastal location that lacks the high volume of traffic found on the western side of Narragansett Bay. Newport Grand is accessible from the west and south via I-95. On I-95 north, travelers take Exit 5A to Route 102 east and then US Route 1 south to US Route 1A crossing the Jamestown and Claiborne Pell Bridges into Newport. From eastern Massachusetts via I-195 travelers take Exit 8A onto Route 24/114/138 into Newport. It should be noted that Newport, Rhode Island has a sizeable tourist influx during the summer months.

That, however, is still only part of the story. Not only does Newport operate in smaller and more seasonal market, but as shown in Exhibits 2.6 and 2.4 the distance adjusted per adult spending base is less than half that at Twin River. What this means is that not only is Newport operating in a smaller market, it is generating less spending from the available adults in this market. In other words, Newport is underperforming on a relative basis when compared to Twin River.

BASELINE: STATUS QUO ANALYSIS

In order to fully assess the extent of the impact of recently authorized gaming in Massachusetts CCA was asked by the State of Rhode Island to generate *status quo* projections for Twin River and Newport Grand for the next five years (FY 2012- FY 2017), assuming there are no new casinos in Massachusetts during this period. The resulting projections are presented in Exhibits 2.7 and 2.8.

Exhibit 2.7: Status Quo Rhode Island Revenue Projections (in \$ Millions) by Fiscal Year

GGR (in millions)	2011	2012	2013	2014	2015	2016	2017	CAGR
Twin River	\$442.4	\$470.0	\$487.9	\$500.1	\$512.6	\$525.4	\$538.6	3.6%
Newport Grand	\$50.2	\$47.5	\$48.7	\$49.9	\$51.2	\$52.4	\$53.7	1.2%
Rhode Island Gaming Revenue	\$492.6	\$ 517.5	\$ 536.6	\$ 550.0	\$ 563.8	\$ 577.8	\$ 592.3	3.4%

State Revenue (in millions)	2011	2012	2013	2014	2015	2016	2017	CAGR
Twin River	\$270.4	\$285.20	\$301.52	\$309.06	\$316 79	\$324 71	\$337.87	3.8%
Newport Grand	\$31.0	•	\$29.80	•	•	•	•	1.0%
State Share of GGR	\$ 301.4	\$ 314.7	\$ 331 3	\$ 339.6	\$ 348 1	\$ 356.8	\$ 365 7	3.6%

CAGR=Compund Average Growth Rate

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC. estimates

In generating estimates for fiscal year 2012 we relied upon the estimates of net terminal income (gross gaming revenue) for FY 2012 adopted at the November 2011 Revenue Estimating Conference. Upon reviewing the most recent monthly results for Newport Grand, however, we concluded that recent month over month improvements in gross gaming revenue indicate that the facility may have bottomed out in terms of the recession-related revenue declines of the past few years. Consequently, we estimate that Newport GGR may grow slightly in FY 2013. For FY 2014 through FY 2017, we assume the moderate improvement in general economic conditions that commenced in late 2010 through 2011 continues through 2017 and that as a result GGR at the two facilities will grow modestly (2.5 percent) along with the local economy.

Exhibit 2.7 presents these results. We project that, in absence of competition from casinos and a racino in Massachusetts, Rhode Island gross gaming revenue from VLTs would grow by approximately \$74.8 million, or 14.4 percent, over the next five years. We estimate that the State's share of these revenues would grow by \$51.1 million over the same period.

Exhibit 2.7 breaks down the total Rhode Island gaming revenue and State share estimates presented in Exhibit 2.8 by property by year and, as discussed above, in the absence of additional competition from outside the State, we would expect gaming revenue and the associated State share to grow moderately over the next five years.



BASELINE: STATUS QUO ANALYSIS WITH TWIN RIVER TABLES

As part of its *status quo* analysis, CCA was asked to generate projections of the demand for table games at Twin River in the absence of three casinos and a racino in Massachusetts for the next five years (FY 2012-FY 2017).

Other Comparable Markets

To determine likely distance adjusted per-adult spending on table games at Twin River, utilizing the methodology described in Section 1, CCA applied its models and methodology to actual spending on table games in similar urban and suburban area casinos in other jurisdictions, specifically Kansas City, Kansas (and Missouri); St. Louis, Missouri; Pittsburgh, Pennsylvania; and North Delaware/South Philadelphia.

Exhibit 2.9 summarizes the resulting per adult spending base from these comparable markets after the application of CCA's gravity model.

Exhibit 2.9: Distance Adjusted per Adult Spending Base by Comparable Market

Summary - Overall Spending Base			\$559.19	\$81.58
		Average	\$479.45	\$101.0
	Chester Downs		\$402.80	\$114.20
So. Philadelphia/ North Delaware	Delaware Park		\$556.10	\$87.90
		Average	\$551.50	\$76.25
	Mountaineer		\$257.00	\$33.50
	Wheeling		\$407.00	\$28.5
	Meadows		\$1,037.00	\$73.0
Pittsburgh	Rivers Casino		\$505.00	\$170.00
		Average	\$601.80	\$72.73
	Argosy Alton		\$395.00	\$22.6
	Casino Queen/Lumiere/Ri	ver City	\$458.00	\$81.60
St. Louis	Ameristar/Harrah's		\$592.00	\$114.00
		Average	\$604.00	\$76.30
	Ameristar/Harrah's/IOC		\$762.00	\$103.30
Kansas City	Argosy Riverside		\$446.00	\$49.30
			Slots	Tables

Distance Adjusted Per Adult Spending Base by Market

Source: Christiansen Capital Advisors, LLC

CCA developed projections for table win (consumer spending or gross gaming revenue) at Twin River. The technique we employed relies on ratios of consumer spending to adult population observed in comparable markets. Exhibit 2.10 presents these base year revenue projections for table games at Twin River utilizing the spending base from the comparable markets presented in Exhibit 2.9 when we assume that Twin River tables are roughly equal in quality of attraction to the comparables presented in Exhibit 2.9. The result is base year potential table revenue of \$139.6 million.

Distance Range	Adult Population	Distance, Income, and	Spending Base	Actual Spending ⁻ per Adult	Total Revenues (\$M)
0-10	505,930	67.8%	\$81.58	\$55.32	\$28.0
10-25	744,972	36.5%	\$81.58	\$29.79	\$22.2
25-50	3,208,931	22.7%	\$81.58	\$18.55	\$59.5
50-75	2,489,245	8.1%	\$81.58	\$6.61	\$16.5
75-100	1,494,335	3.8%	\$81.58	\$3.10	\$4.6
100-125	2,006,953	1.3%	\$81.58	\$1.10	\$2.2
125-150	6,363,388	0.4%	\$81.58	\$0.33	\$2.1
150-175	6,749,684	0.2%	\$81.58	\$0.17	\$1.1
175-200	2,241,330	0.4%	\$81.58	\$0.32	\$0.7
Out a	of Market	2.0%			2.7
Total	25,804,768				\$139.6

Exhibit 2.10: Twin River Tables Market Demand Output

Source: Christiansen Capital Advisors, LLC

The estimates presented in Exhibit 2.10 are, as noted, base year (Year 3) demand estimates. They are not assessments of all operators' ability to accommodate this demand. We have found in other markets that even well-managed gaming facilities take approximately three full years of operation to establish their operations in the marketplace and capture the existing demand for gaming they contain.

We assume that machine gaming facilities absorb 75.0 percent of the existing market demand in the first full year of operation, and 88.0 percent in the second year. These rates are based upon observed experience in other markets. New gambling markets are typically characterized by two to three years of double-digit growth as gambling supply is absorbed and properties establish themselves in the market. For example, when one of our comparables, Delaware Park, opened in 1996 first year revenues totaled \$111.2 million, second year revenues totaled \$150.6 million, and year three revenues totaled \$171.9 million. In other words, Delaware Park year one revenues were 65.0 percent of those in year three and year two results were 87.6 percent of year three results. Exceptional marketing of a given property can accelerate this trend while lack of marketing can decelerate it, but in our experience most markets' average growth rates are consistent with the percentages we assume in this report. In a more recent example from a comparable market, Caesars's Chester Downs facility generated \$285.9 million in slot revenue its first year of operation (Jan-Dec. 2007) and \$328.5 million in Year Two a year over year increase of 14.5 percent. In Year 3, due to the exogenous factor of the onset of severe recession in late 2007, revenue actually declined slightly, but the results from Years One and Two are what we would typically expect to see in regional gambling market evolution.

When markets mature and supply and demand for gambling come into balance, growth rates typically decline to levels that fluctuate one or two points within ranges for growth or decline in market population and *per capita* income. By Year Three, well-managed facilities typically absorb most of the latent demand in the marketplace. In other words, we assume it will take three years for the market to mature. After that point, (i.e., Years Four and Five and onward) we assume a 2.5 percent growth rate, which is consistent with growth rates in other mature gambling markets. The resulting projections are presented in Exhibit 2.11.

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Exhibit 2.11 presents five-year projections for both Twin River and Newport Grand assuming Twin River is allowed table games and Twin River installs and operates enough table games to absorb the existing market demand (CCA estimates this to be approximately 125 tables games). We project that with table games at Twin River, Newport Grand will suffer some competitive impacts from a more attractive Twin River facility. This impact is estimated at a loss of \$5.8 million in FY 2017 or -10.8 percent of Newport Grand VLT revenue versus the without table games at Twin River scenario (Exhibit 2.10).

As there currently is no law in the State of Rhode Island authorizing table games, and thus no framework for determining the State's share of table game revenue and statutory expenses for the operation of table games, we assumed a total revenue share to the State of 35.0 percent, which is consistent with other eastern states that have added table games to previously slot machine or VLT-only operations including Delaware (33.9 percent including distributions to purses and other earmarks) and West Virginia (35.0 percent including purse distributions and other earmarks), but higher than Pennsylvania, where the state's share of table game revenue started at 16.0 percent in the first year and now stands at 14.0 percent (12.0 percent State, 2.0 percent local).

Exhibit 2.11: Rhode Island Revenue Projections w/Tables at Twin River by Fiscal Year

GGR (in millions)	2011	2012	2013		2014		2015	2016		2017	CAGR
Twin River Slot	\$442.4	\$ 470.0	\$ 487.9	\$ ¢		•			•		2.8%
Twin River Tables Newport Grand	\$50.2	\$ 47.5	\$ 48.7	\$ \$		•		139.6 47.2			-0.8%
Rhode Island Gaming Revenue	\$492.6	\$ 517.5	\$ 536.6	\$	647.1	\$	672.2	\$ 697.0	\$	708.2	7.3%

State Revenue (in millions)	2011	201	2	2013		2014		2015		2016		2017	CAGR
Twin River Slot Twin River Tables	\$270.4	\$ 285.2	\$	301.5	\$ \$		•	310.6 43.0	•		•		3.1%
Newport Grand	\$31.0	\$ 29.5	\$	29.8	\$		•		•		•		-0.9%
State Share of GGR	\$ 301.4	\$ 314.7	\$	331.3	\$	371.6	\$	382.2	\$	393.1	\$	399.2	5.4%

Assumes Tables in Operation Jul. 1, 2013 and State Share of 35%

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC. estimates

Exhibit 2.12 summarizes and expresses in graphical form the results from Exhibit 2.11.



Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC. estimates

3. Competitive Threats Scenarios

Utilizing the models and methodology developed in our assessment of the current casino gambling market in Southern New England, which is described in Section 2, we constructed estimates of the revenue potential of locating three casinos and a racino in Massachusetts and their impacts on Rhode Island's two gaming facilities.

This section of the report presents an assessment of current demand for three casinos and a racino in Massachusetts and its disposition in the regional marketplace, and should not be confused with any *pro forma* projections of gross revenue at proposed Massachusetts gaming facilities. Financial models cannot assess the quality of prospective operators or the quality of uncompleted developments. In a somewhat facetious, yet instructive, example, a warehouse filled with 20 slot machines and a craps table would not effectively supply the demand for gambling products and services that exists in New England. Only a well designed, well managed casino and/or racino can effectively supply the demand for gambling products and services that exists in New England.

The projections presented below represent the potential revenues for the proposed Massachusetts facilities assuming this regional market is effectively serviced. We have assumed that the proposed Massachusetts facilities will be relatively comparable to others in the marketplace (notably Foxwoods and Mohegan Sun).

As discussed elsewhere in this report, geographic proximity is an important variable when assessing the demand for a proposed casino facility. As casino gaming becomes increasingly available throughout New England casino visitation becomes more frequent and spending on casino games increases. For example, casino visitation and spending by residents of Massachusetts will increase as travel time to the nearest casino is reduced to 45 minutes to an hour for the vast majority of Massachusetts residents. Furthermore, geographic proximity to population centers is a significant competitive advantage in the casino gaming business.

In short, with the opening of three casinos and a racino in Massachusetts overall spending on casino gaming by consumers throughout the region will increase substantially. Our models indicate that roughly 70.0 percent of the population who reside closer to a Massachusetts facility and choose to participate in gaming will spend their money in Massachusetts rather than at Connecticut or Rhode Island facilities. In other words, most of the increased regional spending on gaming will go to the new Massachusetts facilities.

Connecticut

We were also asked to look at the likelihood of a Connecticut response to increased competition from Massachusetts and its likely impacts. Currently only the Mohegan and Mashantucket Pequot tribes are authorized to conduct casino gaming in Connecticut. Pursuant to Tribal-State gaming compacts, both tribes share a portion of the revenues from their slot machines with the State of Connecticut. These payments totaled over \$342.3 million for the year fiscal year ended June 30, 2011. The continuation of these revenue-sharing payments depends on an exclusivity clause in a memorandum of understanding between these two tribes and the State of Connecticut. Under the memorandum of

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understanding the revenue sharing payments terminate if any change in Connecticut law permits operation of slot machines or other commercial casino games in Connecticut, or any other person lawfully operates slot machines or other commercial casino games within the State, except those consented to by the tribes.

This represents a significant hurdle to authorization of further casinos in the State of Connecticut. Conceivably, the State and its Federally recognized tribes might agree to additional tribal casinos in Connecticut. In a hypothetical agreement of this kind the most logical place to site additional Connecticut tribal casinos would be in the center or the western part of the State, rather than Eastern Connecticut, which is already fully supplied with casino games. Thus, the impacts on Rhode Island facilities of a hypothetical expansion of tribal gaming in Connecticut would not be severe and might be barely perceptible. In our revenue projections for Twin River and Newport Grand we estimate that less than 3.0 percent (2.5 percent Exhibit 1.5) is derived from Connecticut, which is greater than the estimate by the Center for Policy Analysis (1.0 percent, Exhibit 1.5) and the vast majority of this is from far eastern Connecticut. Therefore, the loss of even all of this revenue would have limited impacts on Twin River and Newport Grand.

THE REVENUE IMPACTS OF MASSACHUSETTS CASINOS

In assessing the impacts of Massachusetts gaming facilities we considered many possible scenarios based upon the known applicants at the time of this report's drafting. Inevitably, some of these proposed facilities will fall by the wayside, either because the applicants will be unable to obtain local approval or financing or encounter some other impediment to the development they propose. Furthermore, additional applicants may materialize in the coming months.

After consultation with the Rhode Island Department of Revenue and careful review of public proposals for gaming development in Massachusetts we selected three scenarios for the locations of the three casinos and one racino authorized in the Commonwealth. Using these three scenarios we evaluated the best, the worst, and the likely impacts of Massachusetts gaming on Twin River and Newport Grand and the Rhode Island economy. Additional possible scenarios are presented in Appendix A.⁹

In all three of the scenarios we examined the advent of casino gaming in Massachusetts has substantial negative impacts on Twin River and Newport Grand. A substantial portion of Rhode Island gambling revenues are contributed by Massachusetts residents (Exhibit 1.5), and, as previously noted, it is rare for the public to drive by one gambling facility to get to another. The end result of expanded gaming in Massachusetts is that the flow of cars and spending that currently crosses the Rhode Island border on its way to Connecticut or the two Rhode Island VLT-only establishments will stay in Massachusetts. In terms of the relative revenue impacts upon the State of Rhode Island, the following

⁹ In conducting our analysis of possible casino locations in Massachusetts we discovered that there was little difference (approximately \$3.0 million) between the three current proposals for gaming in Region B (Western Massachusetts) in terms of the revenue impacts on Rhode Island gaming facilities. Thus we combined these results into one scenario for Region B and focused on the possible outcomes for Regions A and C.

section shows that the closer Massachusetts facilities are located to Rhode Island, the greater the impacts on Rhode Island gaming facilities.

In assessing the impacts of Massachusetts gaming on the existing Rhode Island VLT facilities, we have relied primarily upon a gravity model analysis utilizing the methodologies and methods described in Section 1. To test the veracity of those models we reviewed experience in other markets with VLT facilities that derived a substantial portion of their gaming revenues from a nearby State, which subsequently authorized gaming. Specifically, we reviewed the impact of Pennsylvania casinos on Wheeling Downs and Mountaineer Park in West Virginia and Delaware Park in Northern Delaware.

We assumed in all three scenarios that casino licenses in Massachusetts will not be issued until late 2012 or early 2013, and further that the Commonwealth's first gaming facility to open will be the racino license, in July 2014. We assume that Massachusetts' three casinos will open one year later.

BEST CASE

The scenario with the smallest impact on the Rhode Island VLT facilities is a Region A casino at Suffolk Downs in East Boston, a region C casino in New Bedford, a racino at Raynham Park in Raynham and one of the three currently known applicants for gaming in Region B (western Massachusetts) (Exhibit 3.1). We note that in determining the best, worst and likely cases we focused on the impacts on total gaming revenue in Rhode Island (i.e., both Newport Grand and Twin River), not these facilities individually. Thus while a casino in New Bedford is the worst case for Newport Grand, because this area contributes a relatively small part of total VLT revenues in the State of Rhode Island, it is the best possible outcome for the State overall.¹⁰

¹⁰ We have assumed in this study that the Massachusetts tribal facility would be located in Middleboro, a location that the Wampanoag Tribe has worked with in the past. To date, however, no firm location for a proposed Wampanoag facility has been announced; thus this location could change.





Exhibit 3.2 presents our estimates of the impacts of gaming in Massachusetts on Rhode Island VLT revenue under the current best case scenario for casino/racino locations in Massachusetts. As shown in this exhibit, even in the best case, the impacts on Rhode Island gaming revenue are severe. We project gaming revenue will decline from a peak of \$557.5 million in FY 2014 to \$416.0 million by FY 2017, a decline of 25.4 percent. The State's share of this revenue will decline from a peak of \$344.2 million in FY 2014 to \$256.9 million in FY 2017, likewise a decline of 25.4 percent.

As noted above, our best case scenario has different implications for the two Rhode Island facilities. Twin River, located in close proximity to half of Rhode Island's population, is less severely impacted than Newport Grand, which must draw customers from further afield. Thus while we estimate that the overall impacts on the State's two VLT facilities would be a decline of 25.4 percent by FY 2017, for Twin River, with easy access from Providence, the overall impact would be a 22.9 percent decline from the peak in FY 2014. At Newport Grand, we estimate that VLT net terminal income could decline by as much as 50.1 percent.

Exhibit 3.2: Best Case Revenue Projections w/o Table Games, Facility Detail by Fiscal Year

GGR (in millions)	2011	2012	2013	2014	2015	2016	2017	CAGR
Twin River	\$442.4 \$	470.0	\$ 487.9	\$ 507.6	\$ 472.9	\$ 410.8	\$ 391.4	-1.9%
Newport Grand	\$50.2 \$	47.5	\$ 48.7	\$ 49.9	\$ 45.8	\$ 28.7	\$ 24.5	-8.5%
Rhode Island Gaming Revenue	\$492.6 \$	517.5	\$ 536.6	\$ 557.5	\$ 518.7	\$ 439.5	\$ 416.0	-2.6%

State Revenue (in millions)	2011	2012	2013	2014	ļ	2015	2016	2017	CAGR
	6070 4	4	A 201 F	é 040 7				<u>.</u>	1.00/
Twin River			\$ 301.5 \$ 29.8						-1.8% -8.6%
Newport Grand	\$31.0	ş 29.5	\$ 29.8	Ş 30.5	Ş	28.0 \$	5 17.0	\$ 15.0	-8.0%
State Share of GGR	\$ 301.4	\$ 314.7	\$ 331.3	\$ 344.2	\$ 3	320.3 \$	271.5	\$ 256.9	-2.5%

Assumes Taunton/Rayhnam opens permanent facility Jul. 2014. Casinos Jul. 2015

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

Exhibit 3.3 summarizes and expresses in graphic format the results presented in Exhibit 3.2.





Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC. estimates

WORST CASE

The scenario for gaming in Massachusetts with the greatest adverse impact on the Rhode Island VLT facilities is a Region A casino in Foxboro, a Region C casino in New Bedford, a racino at Plainridge Racecourse in Plainville, and one of the three currently known applicants for gaming in Region B (western Massachusetts) (Exhibit 3.4).



Source: Christiansen Capital Advisors, LLC

In evaluating the worst case scenario we assumed that Twin River and the Plainville property are relatively comparable, i.e., these facilities are of relatively comparable quality and finish, and that marketing and promotional efforts in this area will be equally beneficial to both operators. ¹¹ These two sites, a mere 11 miles apart, would aggressively compete for gamblers. CCA maintains that if our assumption that these two facilities are comparable proves to be incorrect, and one builds a superior facility or implements a superior marketing program, the superior facility would capture significant market share. A site in Plainville will draw from areas that are rich in population and *per capita* income. Our models and results from these areas are very sensitive to changes in facility and/or operator quality. In other words, small differences in facility quality and/or management effectiveness in the densely populated areas of southern Massachusetts and northern Rhode Island can produce large swings in the revenue potential of gaming facilities located in this area.

Exhibit 3.5 presents our estimates of the impacts of gaming in Massachusetts on Rhode Island VLT revenue under our worst case scenario for casino/racino locations in Massachusetts. The impacts on Rhode Island gaming revenue are severe. In this worst case scenario Rhode Island gaming revenue

¹¹ Although in accordance with Massachusetts Session Law, Act 2011, Chapter 194, Plainville will be smaller than Twin River (1,250 machines).

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declines from a peak of \$557.5 million in FY 2014 to \$340.7 million by FY 2017, or a negative 38.9 percent. The State of Rhode Island's share of video lottery net terminal income declines from a peak of \$336.6 million in FY 2014 to \$210.4 million in FY 2017.

Unlike our best case scenario, our worst case scenario impacts both Rhode Island gaming facilities almost equally. On Twin River the overall impact would be a 38.4 percent decline from its peak in FY 2014. For Newport Grand, VLT revenues would decline by 43.5 percent.

Exhibit 3.5: Worst Case Revenue Projections w/o Table Games, Facility Detail by Fiscal Year

GGR (in millions)	2011	2012	2013	2014		2015	2016	2017	CAGR
Twin River			\$ 487.9	•	•		•	•	-4.9%
Newport Grand	\$50.2 \$	6 47.5	\$ 48.7	Ş 49.9	Ş	45.8	\$ 31.8	Ş 28.2	-7.3%
Rhode Island Gaming Revenue	\$492.6 \$	517.5	\$ 536.6	\$ 557.5	\$	481.9	\$ 376.8	\$ 340.7	-5.1%

State Revenue (in millions)	2011	2012	2013	2014	2015	2016	2017	CAGR
Twin River	\$270.4	285.2	301.5	313.7	269.5	213.2	193.1	-4.8%
Newport Grand	\$31.0	29.5	29.8	30.5	28.0	19.5	17.3	-7.4%
State Share of GGR	\$ 301.4	\$ 314.7	\$ 331.3	\$ 344.2	\$ 297.6	\$ 232.7	\$ 210.4	-5.0%

Assumes Plainville opens permanent facility Jul. 2014. Casinos Jul. 2015

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC. estimates

Exhibit 3.6 summarizes and expresses in graphic form the results presented in Exhibit 3.5.




LIKELY CASE

In consultation with the Rhode Island Department of Revenue, we determined that a likely current scenario for gaming in Massachusetts is a Region A casino at Suffolk Downs in East Boston, a region C casino in Middleboro, a racino at Plainridge Racecourse in Plainville, and one of the three currently known applicants for a license in Region B (western Massachusetts) (Exhibit 3.7).



Exhibit 3.8 presents our estimates of the impacts of gaming in Massachusetts on Rhode Island VLT revenue under this likely case for casino/racino locations in Massachusetts. As shown in this exhibit, the impacts on Rhode Island gaming revenue are severe and only marginally better than the worst case impacts. In this likely case scenario Rhode Island gaming revenue declines from a peak of \$545.1 million in FY 2014 to \$366.3 million by FY 2017, a decline of 34.1 percent. The State of Rhode Island's share of video lottery net terminal income declines from a peak of \$344.2 million in FY 2014 to \$226.2 million in FY 2017, again a decline of 34.1 percent.

As was the case under our worst case scenario, our likely case scenario adversely impacts both Rhode Island gaming facilities almost equally. On Twin River the overall impact is a 33.7 percent decline in gaming revenue from the peak in FY 2014. At Newport Grand, gaming revenues decline by 38.8 percent.

Exhibit 3.8: Likely Case Revenue Projections w/o Table Games, Facility Detail by Fiscal Year

GGR (in millions)	2011	2012	2013	2014	2015	2016	2017	CAGR
Twin River Newport Grand	\$442.4 \$ \$50.2 \$				•	\$ 365.1 \$ \$ 33.0 \$		-4.0% -6.8%
Rhode Island Gaming Revenue	\$492.6 \$	517.5	\$ 536.6	\$ 557.5	\$ 480.7	\$ 398.1 \$	366.3	-4.3%

State Revenue (in millions)	2011	2012		2013	2014	2015	2016	2017	CAGR
Twin River	\$270.4	\$ 285.2	\$ 30)1.5 \$	313.7	\$ 269.5	\$ 225.6	\$ 208.0	-3.8%
Newport Grand	\$31.0	\$ 29.5	\$ 2	29.8 \$	30.5	\$ 27.3	\$ 20.2	\$ 18.1	-6.9%
State Share of GGR	\$ 301.4	\$ 314.7	\$ 33	31.3 \$	344.2	\$ 296.8	\$ 245.8	\$ 226.2	-4.2%

Assumes Plainridge opens permanent facility Jul. 2014. Casinos Jul. 2015

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC. estimates





Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC. estimates

TWIN RIVER IS ALLOWED TABLE GAMES

In this section, we assess the impacts of three casinos and a racino located in Massachusetts on the gross gaming revenues of the two Rhode Island gaming facilities assuming that Twin River is allowed to expand its product offering to include table games.

Our review of the experience of markets similar to Rhode Island suggests that VLTs, while an attractive product, are not as attractive as a full-blown casino (slots and tables). Virtually without exception, the gambling public prefers a broad spectrum of games, including traditional three reel machines, low denomination machines (penny and nickel slots), video machines, house-banked table games and non-house banked table games such as poker. Restrictions on the types of games allowed or denomination limits at casinos have been shown to limit gross gaming revenues.

As illustrated by the Pennsylvania, West Virginia, Delaware and Maryland experience reviewed in this report, the evidence strongly suggests that if Twin River is allowed table games the potential and actual impacts of new casinos in Massachusetts could be somewhat mitigated.

In Section 2 CCA presented estimates of the demand for table games at Twin River, assuming no gaming facilities in Massachusetts, utilizing our gravity models for this purpose. The results are presented in Exhibit 2.10. Assuming that table games in Rhode Island would perform as well as table games in other comparable markets (and using a per adult distance-adjusted spending base of \$81.58), we found that the overall demand for table gaming in the Rhode Island market in the absence of competition in Massachusetts is approximately \$139.6 million (Exhibit 2.10). To generate estimates of the potential Twin River table game revenues assuming competition from Massachusetts under best case, worst case, and likely case scenarios, we performed multiple iterations of our models for the currently known applicants for Massachusetts casinos.

As discussed in the presentation of our projections for table games at Twin River in the previous section, the models CCA employs measure demand in the market for a given supplier based upon the criteria described in that section and in the methodology section (Section 2). This analysis does not measure the balance between supply and demand; that is, it does not measure degrees of market saturation. In the process of conducting our analysis, we learned that Twin River plans to add 65 tables to its current facility. That level of supply would not be adequate to produce the results from our demand model in the early years (i.e., prior to competition coming on-line in Massachusetts). In addition, Twin River has indicated that it would not expand its physical footprint to accommodate table games. CCA calculates that, given this limitation, the addition of 65 table games at Twin River will necessitate the removal of 200 to 300 of its current video lottery terminals from the gaming floor. Thus, the number of VLTs in operation at Twin River will be fewer once table games have been installed in the existing facility.

As shown in exhibits 3.10 through 3.15, the demand for table games at Twin River will be very strong before competing table facilities open in Massachusetts, but (to a degree, depending upon whether our best, worst, or likely case scenario is assumed) drops off considerably by FY 2017. It is thus understandable that Twin River might be reluctant to invest in the capital construction needed to house and manage 125 table games (the amount CCA estimates would be needed to service the level of

demand we project in FY 2014 and FY 2015) in addition to a full complement of VLTs only to have to remove tables from the floor beginning in FY 2016.

Given the projected number of tables at Twin River (65 tables) we have reduced our Twin River gross gaming table revenue estimates by assuming that table productivity will reach an upward limit at around \$3,500 per table per day, one of the highest observed rates in regional markets in the United States. While there are some jurisdictions and properties that have achieved higher per-table productivity, those tables are located in properties in Las Vegas, Macau, and, to a lesser extent, Atlantic City that deal to high limit (premium) play. We do not expect to see many high rollers in Lincoln, Rhode Island.

BEST CASE WITH TWIN RIVER TABLES

In this section, we adjust our best case models to include table games as well as slot machines at Twin River. To recapitulate, the best case is a Region A casino at Suffolk Downs in East Boston, a region C casino in New Bedford, a racino at Raynham Park in Raynham and one of the three currently known applicants for gaming in Region B (western Massachusetts).

Exhibit 3.10 presents our estimates of the best case impacts of gaming in Massachusetts on Rhode Island gaming revenue if Twin River is allowed table games. As shown in this exhibit, even with table games, Rhode Island gaming revenue and the associated State of Rhode Island share declines. In our projections Rhode Island gaming revenue declines from a peak of \$625.1 million in FY 2014 to \$471.8 million by FY 2017, or by 24.5 percent. The State of Rhode Island's share declines from a peak of \$364.6 million in FY 2014 to \$273.8 million in FY 2017, or by 24.5 percent. For FY 2017, this is a \$16.9 million, or 6.6 percent, improvement over best case scenario gaming revenues without table games at Twin River (Exhibits 3.10, 3.2).

As noted above, the labor-intensive nature of table games would not allow for the profitable operation of table games at a revenue-sharing rate as high as that imposed on video lottery terminals. With a 35.0 percent share of Twin River table revenue, the revenue available to the State of Rhode Island will not grow as much as the growth in gross gaming revenue (GGR).

Exhibit 3.10: Best Case Revenue Projections w/Table Games, Facility Detail by Fiscal Year

GGR (in millions)	2011	2012	2013	2014	2015	2016	2017	CAGR
Twin River VLTs	\$442.4	\$ 470.0	\$ 487.9	\$ 495.2	\$ 461.3	\$ 400.8	\$ 381.9	-2.3%
Twin River Tables				\$ 80.0	\$ 85.0	\$ 82.1	\$ 65.7	
Newport Grand VLTs	\$50.2	\$ 47.5	\$ 48.7	\$ 49.9	\$ 45.8	\$ 28.5	\$ 24.2	-8.6%
Rhode Island Gaming Revenue	\$492.6	\$ 517.5	\$ 536.6	\$ 625.1	\$ 592.1	\$ 511.4	\$ 471.8	-0.7%

State Revenue (in millions)	2011		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	\$270.4	Ś	285.2	Ś	301.5	Ś	306.0	Ś	285.1	Ś	247.7	Ś	236.0	-2.1%
Twin River Tables	+	T		Ŧ		\$		•	29.8	•				
Newport Grand VLTs	\$31.0	\$	29.5	\$	29.8	\$	30.5	\$	28.0	\$	17.4	\$	14.8	-8.7%
State Share of GGR	\$ 301.4	\$	314.7	\$	331.3	\$	364.6	\$	342.9	\$	293.8	\$	273.8	-1.5%

Assumes Tables in Operation Jul. 1, 2013 and State Share of 35%

Assumes Taunton/Rayhnam opens permanent facility Jul. 2014. Casinos Jul. 2015

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC. estimates





Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC. estimates

WORST CASE WITH TWIN RIVER TABLES

In this section we adjust our worst case models to include table games as well as slot machines at Twin River. To recapitulate, the worst case is a Region A casino in Foxboro, a region C casino in New Bedford, a racino at Plainridge Racecourse in Plainville, and one of the three currently known applicants for gaming in Region B (western Massachusetts).

Exhibit 3.12 presents our estimates of the worst case impacts of gaming in Massachusetts on Rhode Island gaming revenue if Twin River is allowed table games. As shown in this exhibit, even with table games Rhode Island gaming revenue and the associated State of Rhode Island share declines. In our worst case projections gross gaming revenue declines from a peak of \$625.1 million in FY 2014 to \$361.7 million by FY 2017, or by 42.1 percent. For FY 2017, this is a \$21.0 million or 6.2 percent improvement over gaming revenues in the worst case scenario without table games at Twin River (Exhibits 3.12, 3.5).

As noted above, the labor-intensive nature of table games would not allow for the profitable operation of table games at a revenue-sharing rate as high as that imposed on slot machines. With a 35.0 percent share of table revenue, the revenue available to the State of Rhode Island will not grow as much as the growth in GGR. We estimate that the State of Rhode Island share of gross gaming revenue declines from a peak of \$364.6 million in FY 2014 to \$214.4 million by FY 2017. For FY 2017, this is a \$10.4 million or 4.9 percent improvement over State of Rhode Island gaming revenues in our worst case scenario without table games at Twin River (Exhibits 3.12, 3.5).

GGR (in millions)	2011		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	\$442.4	\$ <i>i</i>	470.0	\$	487.9	\$	495.2	\$	425.5	\$	336.6	\$	304.8	-5.2%
Twin River Tables						\$	80.0	\$	85.0	\$	54.8	\$	33.6	
Newport Grand	\$50.2	\$	47.5	\$	48.7	\$	49.9	\$	44.6	\$	27.7	\$	23.3	-8.9%
Rhode Island Gaming Revenue	\$492.6	Ś	517.5	Ś	536.6	Ś	625.1	Ś	555.1	Ś	419.1	Ś	361.7	-4.49

Exhibit 3.12: Worst Case Revenue Projections w/Table Games, Facility Detail by Fiscal Year

State Revenue (in millions)	2011	Ĩ	2012	2013	2014		2015	2016	2017	CAGR
Twin River VLTs	\$270.4	\$ 28	35.2	\$ 301.5	\$ 306.0	\$	262.9	\$ 208.0	\$ 188.4	-5.1%
Twin River Tables					\$	•	29.8			
Newport Grand VLTs	\$31.0	\$ 2	29.5	\$ 29.8	\$ 30.5	\$	27.3	\$ 17.0	\$ 14.3	-9.0%
State Share of GGR	\$ 301.4	\$ 31	L4.7	\$ 331.3	\$ 364.6	\$	320.0	\$ 244.1	\$ 214.4	-4.8%

Assumes tables in Operation Jul. 1, 2013 and State share of 35%

Assumes Taunton/Rayhnam opens permanent facility Jul. 2014. Casinos Jul. 2015

Source: Rhode Island Department of Revenue and Christiansen Capital Advisors, LLC. estimates

Exhibit 3.13 summarizes and expresses in graphic format the results presented in Exhibit 3.12.



Source: Rhode Island Department of Revenue and Christiansen Capital Advisors, LLC. estimates

LIKELY CASE WITH TWIN RIVER TABLES

In this section we adjust our likely case models to include table games as well as slot machines at Twin River. To recapitulate, the likely case is a Region A casino at Suffolk Downs in East Boston, a region C casino in Middleboro, a racino at Plainridge Racecourse in Plainville, and one of the three currently known applicants for gaming in Region B (western Massachusetts).

Exhibit 3.14 presents our estimates of the likely case impacts of gaming in Massachusetts on Rhode Island gaming revenue if Twin River is allowed table games. As shown in this exhibit, even with table games Rhode Island gaming revenue and the State of Rhode Island's share declines. In our likely case projections gross gaming revenue declines from a peak of \$625.1 million in FY 2014 to \$418.7 million by FY 2017, or by 33 percent. For FY 2017, this is a \$52.4 million or 14.3 percent improvement over gross gaming revenues in the likely case without table games at Twin River (Exhibit 3.14, 3.8).

As noted above, the labor-intensive nature of table games would not allow for the profitable operation of table games at a revenue-sharing (tax) rate as high as that imposed on slot machines. With a 35.0 percent share of table revenue, the revenue available to the State of Rhode Island will not grow as much as the growth in GGR. Thus we estimate that the State of Rhode Island's share of gross gaming revenue will decline from a peak of \$364.6 million in FY 2014 to \$242.2 million by FY 2017, a decline of 33.6 percent. For FY 2017, this is a \$16.0 million or 7.1 percent improvement over State of

Rhode Island gaming revenues in our likely case scenario without table games at Twin River (Exhibit 3.14, 3.8).

Exhibit 3.14: Likely Case Revenue Projections w/Table Games, Facility Detail by Fiscal Year

GGR (in millions)	2011	2012	2013	2014	2015	2016	2017	CAGR
Twin River Slot	\$442.4	\$ 470.0	\$ 487.9	\$ 495.2	\$ 425.5	\$ 356.2	\$ 328.4	-4.3%
Twin River Tables				\$ 80.0	\$ 85.0	\$ 78.5	\$ 61.0	
Newport Grand	\$50.2	5 47.5	\$ 48.7	\$ 49.9	\$ 44.6	\$ 32.7	\$ 29.2	-7.0%
Rhode Island Gaming Revenue	\$492.6	\$ 517.5	\$ 536.6	\$ 625.1	\$ 555.1	\$ 467.4	\$ 418.7	-2.5%

State Revenue (in millions)	2011	2012	2013		2014		2015		2016		2017	CAGR
Twin River Slot	\$270.4	285.2	\$ 301.5	÷.		•		•		•		-4.2%
Twin River Tables Newport Grand	\$31.0 \$	29.5	\$ 29.8	\$ \$			29.8 27.3			•		-7.1%
State Share of GGR	\$ 301.4 \$	314.7	\$ 331.3	\$	364.6	\$	320.0	\$	267.6	\$	242.2	-3.3%

Assumes tables in Operation Jul. 1, 2013 and State share of 35%

Assumes Plainridge opens permanent facility Jul. 2014. Casinos Jul. 2015

Source: Rhode Island Department of Revenue and Christiansen Capital Advisors, LLC. estimates

Exhibit 3.15 summarizes and expresses in graphic format the results presented in Exhibit 3.14.





THE OBSERVED HISTORICAL EXPERIENCE NEW COMPETITION AND TABLE GAMES IN OTHER MARKETS

As discussed in the opening paragraphs of this section, in addition to estimating the impacts of new competition in Massachusetts and the implementation of table games at Twin River utilizing the gravity models described in the previous section, we also reviewed and analyzed the historical experience of other markets with similar recent histories. Specifically, we reviewed the evolution of gaming in Western Pennsylvania (the greater Pittsburgh market) and Eastern Pennsylvania (greater Philadelphia).

In a situation very much like Rhode Island's, two racinos in West Virginia's panhandle, Mountaineer Park and Wheeling Downs, operated for years in the absence of competing facilities in the abutting Commonwealth of Pennsylvania and the State of Ohio. The bulk of their gaming revenues were contributed by residents of these adjoining jurisdictions. These favorable market conditions were altered in June of 2007 when the first of Western Pennsylvania's gaming facilities, The Meadows (located 35 miles south of Pittsburgh and 30 miles southeast of Mountaineer Park) opened for business. In anticipation of additional supply coming online in Pennsylvania, the State of West Virginia allowed (subject to local approval) its existing VLT facilities to offer table games. These table games came online at Mountaineer in October of 2007, just a few months after the opening of the Meadows (June 2007).

Exhibit 3.16 shows that revenue from VLTs at Mountaineer declined 13.3 percent from \$248.6 million in FY 2007 to \$215.5 million in FY 2008. Revenue from newly authorized table games totaled \$26.3

million, bringing total gaming revenues to \$241.8 million, a decline of only 2.7 percent. While the revenue derived from VLTs continued to decline, to \$197 million in FY 2009, table revenue grew by 87.1 percent to \$49.0 million, resulting in a small gain (1.8 percent) in total GGR over the previous year.

The competitive environment for Mountaineer Park changed yet again, when further supply was added to the Pittsburgh market with the August 2009 opening of the Rivers casino in downtown Pittsburgh. With this further increase in supply (that brought an undersupplied Pittsburgh market closer to balance) gaming revenue declined even further (12.7 percent) to \$190.3 million in FY 2011.



Exhibit 3.16 Mountaineer Park Slot and Table Revenue FY 2005 to FY 2011 (in \$ Millions)

Source: West Virginia Lottery

Wheeling Downs, which is 45 miles Northwest of Pittsburgh, 35 miles north of Mountaineer and 28 miles northeast of the Meadows, was less impacted by the opening of the Meadows due to its distance from the Meadows's primary market (south of Pittsburgh). As shown in Exhibit 3.17, the opening of the much closer Rivers casino in Pittsburgh had more marked impacts on the gaming revenues of Wheeling Downs. VLT revenue declined 19.3 percent, from \$158.0 million to \$128.0 million, in the year (FY 2010) after Rivers opened. Table revenue declined as well (even though Rivers casino was not offering table games at that time). These declines continued in FY 2011, with VLT revenue falling by \$120.8 million and table revenue falling by \$14.5 million, for a combined gaming revenue decline of 13.6 percent.

Exhibit 3.17 Wheeling Downs Slot and Table Revenue FY 2005 to FY 2011 (in \$ Millions)



In other words, even with the addition of table games total gaming revenues at Mountaineer Park declined 23.5 percent from a peak of \$248.6 million FY 2007 to \$190.3 million in FY 2011. The experience at Wheeling Downs is similar, with gaming revenue falling by 32.0 percent from \$199.7 million in FY 2007 to \$135.3 million FY 2011.

The history is slightly different in Delaware, on the far side of the Commonwealth of Pennsylvania. Unlike West Virginia, which authorized table games prior to the opening of competitive facilities in neighboring jurisdictions (although because of the local approval requirement, time to reconfigure the casino, and train the necessary staff, the tables didn't actually open until a few months after the first western Pennsylvania casino appeared) Delaware waited much longer to allow its existing VLT facilities to expand to table games. Exhibit 3.18 presents the experience at Delaware Park, which is part of the greater Philadelphia market. Delaware Park gaming revenue peaked at \$294.0 million in FY 2007. With the opening of nearby (22 miles) Chester Downs (in Pennsylvania) gaming revenue at Delaware Park declined substantially over the next three years to \$225.6 million in FY 2010, a decline of 23.3 percent. Delaware Park opened its table gaming in June of 2010, and this allowed the facility to slightly recover from the low in FY 2010 and grow to \$235.4 million or by 4.3 percent. We note, however, that performance remains below the \$294.2 million in VLT revenue recorded in FY 2007 before Pennsylvania slot machines came online.



Exhibit 3.18 Delaware Park Slot and Table Revenue FY 2005 to FY 2011 (in \$Millions)

IMPLICATIONS FOR THE SUCCESSFUL OPERATION OF TWIN RIVER AND NEWPORT GRAND

CCA was also asked to provide an analysis of the implications of our projections for the successful operation of Twin River and Newport Grand. In the process of conducting our research, we were unable to obtain the financial statements of either Rhode Island VLT operation. Thus in order to complete this task we were forced to collect as much publicly available information ¹² as we could find relating to the operating margins and expenses in addition to the payroll data provided to us by Newport Grand and Twin River to construct estimates of the revenues and expenses of the State's VLT operators. The projections in the following tables are based upon what limited information we were able to obtain, and from analyzing the income statements of other similarly sized gaming facilities. They are in no way meant to be a precise description of the income statements of either Newport Grand or Twin River. Rather they are ball park estimates meant to very generally describe the potential implications of Massachusetts gaming and table games at Twin River on the viability of Rhode Island's gaming facilities. Furthermore, these estimates are for the gaming operations only: they do not include entertainment or food and beverage revenues or expenses or pari-mutuel revenues or expenses.

¹² For example, CCA obtained Twin River's interest payments and projected 2011 EBITDA from a presentation by Twin River management at an administrative hearing before the Rhode Island Department of Business Regulation. September 29, 2010.

For the purposes of this analysis, we have assumed that labor costs are a variable expense and have estimated them as a percentage of gross gaming revenue (GGR). ¹³ Marketing, promotion, taxes, players club, and other variable expenses are estimated at 5.0 percent of GGR. For non-variable expenses such as utilities, snow removal, landscaping, accounting, legal, etc. we have estimated these expenses at \$20.0 million for Twin River and \$2.0 million for Newport Grand and assumed that these expenses are inflated at the rate of 2.5 percent per year.

For this analysis, we have focused on the worst case scenario with and without table games at Twin River. As noted above, Exhibit 3.19 is a ball park estimate but our analysis suggests that under the worst case scenario for gaming in Massachusetts and without table games at Twin River, the profitability of Twin River for its owners could be in jeopardy if any of these expenses are meaningfully higher than our estimates (Exhibit 3.19).

Exhibit 3.19 Implications of Worst Case MA Casino Scenario w/o Twin River Tables

	2012	2013	2014	2015	2016	2017
Twin River Gaming Revenue	\$470.0	\$487.9	\$495.2	\$425.5	\$336.6	\$304.8
Operator's Share	\$130.5	\$135.4	\$137.5	\$118.1	\$93.4	\$84.6
Estimated Payroll	-\$24.0	-\$25.0	-\$25.3	-\$21.8	-\$17.2	-\$15.6
Estimated Marketing and other Variable Expenses	-\$23.5	-\$24.4	-\$24.8	-\$21.3	-\$16.8	-\$15.2
Estimated Non-Variable Operating Expenses	-\$20.0	-\$20.5	-\$21.0	-\$21.5	-\$22.1	-\$22.6
Interest Payments	-\$25.0	-\$25.0	-\$25.0	-\$25.0	-\$25.0	-\$25.0
Estimated Net Income	\$37.9	\$40.6	\$41.4	\$28.5	\$12.3	\$6.2

Source: Christiansen Capital Advisors, LLC.

Assuming a state share of 35.0 percent of table game revenue and labor expenses at approximately 27.0 percent of table game revenue (which is an average of other comparable U.S. table operations) the situation markedly improves at Twin River. (Exhibit 3.20).

¹³ In gaming operations, this is generally true. However, it is also true that at certain low levels of sales or gaming revenue these margins will necessarily increase. In other words, there is a level at which there is no more fat to be cut and a certain threshold of employees is required to keep the facility open. Without access to detailed financials of the State's VLT operators it is impossible to estimate at what level that is, however.

	2012	2013	2014	2015	2016	2017
Twin River Gaming Revenue	\$470.0	\$487.9	\$587.6	\$521.1	\$399.8	\$346.1
Operator's Share	\$130.5	\$135.4	\$192.9	\$176.3	\$131.4	\$108.6
Estimated Payroll	-\$24.0	-\$25.0	-\$47.6	-\$45.3	-\$32.4	-\$25.1
Estimated Marketing and other Variable Expenses	-\$23.5	-\$24.4	-\$29.4	-\$26.1	-\$20.0	-\$17.3
Estimated Non-Variable Operating Expenses	-\$20.0	-\$20.5	-\$21.0	-\$21.5	-\$22.1	-\$22.6
Interest Payments	-\$25.0	-\$25.0	-\$25.0	-\$25.0	-\$25.0	-\$25.0
Estimated Net Income	\$37.9	\$40.6	\$69.9	\$58.5	\$31.9	\$18.6

Exhibit 3.20 Implications of Worst Case MA Casino Scenario with Twin River Tables

As shown in Exhibit 3.20 we estimate that with the addition of table games at Twin River, while the profitability of the operation will still decline under the worst case scenario, Twin River should still be able to comfortably cover its interest payments and still maintain a reasonable level of profitability in 2017. In total, the results of Exhibits 3.19 and 3.20 suggest that the continued viability of Twin River is only in doubt under the worst case for gaming in the State of Massachusetts (and, as noted, these figures are only ball park estimates so the facility may very well continue to be marginally profitable in this worst case scenario) and if the facility is not allowed to add table games. Twin River's profitability should only increase in all other scenarios.

Exhibit 3.21 Implications of Worst Case MA Casino Scenario on Newport w/o Twin River Tables

	2012	2013	2014	2015	2016	2017
Newport Gaming Revenue	\$47.5	\$48.7	\$49.9	\$45.8	\$31.8	\$28.2
Operator's Share	\$13.2	\$13.5	\$13.9	\$12.7	\$8.8	\$7.8
Estimated Payroll	-\$4.8	-\$4.9	-\$5.1	-\$4.7	-\$3.2	-\$2.9
Estimated Marketing and other Variable Expenses	-\$2.4	-\$2.4	-\$2.5	-\$2.3	-\$1.6	-\$1.4
Estimated Non-Variable Operating Expenses	-\$2.0	-\$2.1	-\$2.1	-\$2.2	-\$2.2	-\$2.3
Interest Payments	N/A	N/A	N/A	N/A	N/A	N/A
Estimated Net Income	\$4.0	\$4.1	\$4.2	\$3.6	\$1.8	\$1.3

Unlike Twin River, we were unable to obtain any information on the debt service requirements of Newport Grand so we have constructed our analysis without that data point. Utilizing the assumptions described above, it would appear that if these interest payments exceed \$2.0 million per year the continued profitably of VLT operations at Newport Grand may also be in jeopardy (Exhibit 3.21).

As noted elsewhere in this section, adding table games to Twin River but not Newport will marginally cannibalize Newport VLT revenue as some patrons that live in the areas between the two facilities will choose Twin River over Newport Grand because of the wider array of gaming options. We note, however, that this impact pales in comparison to the impact of gaming in Massachusetts. Thus, the implication of a casino in New Bedford and table games at Twin River is the worst of all possible worlds for Newport Grand. Exhibit 3.22 presents the results of this analysis.

Exhibit 3.22 Implications of Worst Case MA Casino Scenario on Newport with Twin River Tables

	2012	2013	2014	2015	2016	2017
Newport Gaming Revenue	\$47.5	\$48.7	\$49.9	\$44.6	\$27.7	\$23.3
Operator's Share	\$13.2	\$13.5	\$13.9	\$12.4	\$7.7	\$6.5
Estimated Payroll	-\$4.8	-\$4.9	-\$5.1	-\$4.5	-\$2.8	-\$2.4
Estimated Marketing and other Variable Expenses	-\$2.4	-\$2.4	-\$2.5	-\$2.2	-\$1.4	-\$1.2
Estimated Non-Variable Operating Expenses	-\$2.0	-\$2.1	-\$2.1	-\$2.2	-\$2.2	-\$2.3
Interest Payments	N/A	N/A	N/A	N/A	N/A	N/A
Estimated Net Income	\$4.0	\$4.1	\$4.2	\$3.5	\$1.3	\$0.7

Based upon the results of Exhibit 3.21 and 3.22 it appears that the continued viability of Newport Grand as a VLT facility is in question if a Massachusetts casino is located in New Bedford. Thus, we went back through our model scenarios to run the same analysis on Newport Grand for the best case. That is the best case for Newport Grand, not the best case for gaming in the State as a whole as presented earlier in this section.

As might be expected, that is the scenario in which the license for Region C is awarded to the Mashpee Wampanoag's and is located in or around Middleboro and not the New Bedford/Fall River area. The differences between any of these various scenarios that include Middleboro are not significant in terms of the impact on Newport Grand so we have focused on the likely case presented earlier in this report.

Exhibit 3.23 Implications of Likely Case MA Casino Scenario on Newport w/o Twin River Tables

	2012	2013	2014	2015	2016	2017
Newport Gaming Revenue	\$47.5	\$48.7	\$49.9	\$44.6	\$33.0	\$29.6
Operator's Share	\$13.2	\$13.5	\$13.9	\$12.4	\$9.2	\$8.2
Estimated Payroll	-\$4.8	-\$4.9	-\$5.1	-\$4.5	-\$3.4	-\$3.0
Estimated Marketing and other Variable Expenses	-\$2.4	-\$2.4	-\$2.5	-\$2.2	-\$1.6	-\$1.5
Estimated Non-Variable Operating Expenses	-\$2.0	-\$2.1	-\$2.1	-\$2.2	-\$2.2	-\$2.3
Interest Payments	N/A	N/A	N/A	N/A	N/A	N/A
Estimated Net Income	\$4.0	\$4.1	\$4.2	\$3.5	\$1.9	\$1.5

As shown in Exhibits 3.23 and 3.24 a casino in Middleboro improves the operating performance of Newport Grand and nearly doubles the estimated net income. As shown earlier in this report in the revenue projections section, even a casino in Middleboro will have meaningful impacts on the gaming revenue of Newport Grand, and depending upon the level of debt service that the business is required to pay annually, may still inhibit its ability to operate as a going concern.

Exhibit 3.24 Implications of Worst Case MA Casino Scenario on Newport w/ Twin River Tables

	2012	2013	2014	2015	2016	2017
Newport Gaming Revenue	\$47.5	\$48.7	\$49.9	\$44.6	\$32.7	\$29.2
Operator's Share	\$13.2	\$13.5	\$13.9	\$12.4	\$9.1	\$8.1
Estimated Payroll	-\$4.8	-\$4.9	-\$5.1	-\$4.5	-\$3.3	-\$3.0
Estimated Marketing and other Variable Expenses	-\$2.4	-\$2.4	-\$2.5	-\$2.2	-\$1.6	-\$1.5
Estimated Non-Variable Operating Expenses	-\$2.0	-\$2.1	-\$2.1	-\$2.2	-\$2.2	-\$2.3
Interest Payments	N/A	N/A	N/A	N/A	N/A	\$29.2 \$8.1 -\$3.0 -\$1.5 -\$2.3 N/A \$1.4
Estimated Net Income	\$4.0	\$4.1	\$4.2	\$3.5	\$1.9	\$1.4

Source: Christiansen Capital Advisors, LLC.

4. Economic Impacts

INPUT-OUTPUT MODELS

To measure the economic impacts of the proposed Massachusetts resort casinos on Rhode Island and the surrounding communities, CCA employed an input-output (I-O) model. Input-output systems were originally developed by Wassily Leontief to assist in planning the national economy; input-output models are the most frequently used method of measuring economic impacts. Input-output modeling is an equilibrium approach based on an accounting system of injections and leakages in a given economy. Models of these systems incorporate three basic tables. The *Transactions Table* measures inter-industry sales and purchases within a pre-defined region; the *Direct Requirements Table* measures intermediate requirements to produce a dollar of gross output for any given industry, ¹⁴ and the combination of these two tables creates the *Industrial Multiplier Table*. Input-output models allow analysts to remove an industry from the rest of the economy and assess the impacts of an impending change (in this case the addition of table games at Twin River and the negative impact of casino gaming in Massachusetts) in isolation.

At a minimum, the economic impact of any industry or activity is the output produced by that business, or its direct expenditures. However, since other segments of the local and regional economy (the suppliers to that business) will be supported, at least in part, by the new business, the total economic impact is greater than the new business's direct expenditures. Input-output models estimate the total economic impacts of new businesses or new economic activities.

The initial change created by any economic activity is the *direct effect*. Direct effects are the economic activities carried out by the business and/or much of the construction of the facility or facilities used by that business. In the present case these direct effects will include the construction costs associated with reconfiguring the casino to accommodate table games, and, once the table games begin operations, the change in consumer spending on gaming. Direct effects are primarily output, employment and personal (labor) income generated by that activity: As used here, these terms have the following meanings: *output* is the value of goods and services produced at the identified business or construction project; *employment* is the number of people employed, including wage and salary employees and self-employed persons; and *personal income* is the wages, benefits, and other income derived from that employment. The IMPLAN modeling system used in this report measures total employment, including full and part-time workers. For some industries and activities, construction of a gaming facility for example, the level of partial or part-time employment can be significant. Full-time employment or FTEs will be less than the employment figures presented herein.

The casino facility's relationship to other businesses in the area is not fully described by its direct effect, however. *Secondary effects* are generated from this primary spending; economic impacts also include *indirect impacts*, *induced impacts*, and *total impacts*.

¹⁴ Which, of course, can be quite different for different industries. Producing \$1 dollar of gross output from the manufacture of shoes has different intermediate requirements than the intermediate requirements to produce \$1 dollar of gross output in restaurant sales.

Indirect impacts derive primarily from off-site economic activities that are attributable to the identified business establishment. These economic activities occur mainly as a result of *non-payroll expenditures* by the business within a region. For example, gaming facilities spend significant sums on suppliers and utility services, including water and electricity, cleaning, landscaping, legal services and so forth, which become revenue for the suppliers of these services and goods, who in turn purchase goods and services from their suppliers and so on. In short, the *indirect effect* derives from a business (in this case the introduction of table games at Twin River) purchasing goods and services from other businesses. Indirect impacts differ from direct impacts insofar as they originate entirely off-site, although the indirect impacts would not have occurred in the absence of the newly created business.

Induced impacts are the multiplier effects of the direct and indirect impacts created by successive rounds of spending by employees and proprietors.¹⁵

Total impacts are the sum of the direct, indirect, and induced impacts.

THE IMPLAN MODELING SYSTEM

Although there are several sets of multipliers that can be used to obtain estimates of the total economic contribution of any economic activity (including RIMS, RIMS II and REMI), CCA employed local and regional data from IMPLAN for this study.

The Forestry Service of the United States Department of Agriculture developed the IMPLAN multipliers in the 1980s. IMPLAN divides regional economies into 440 industrial sectors. Industries that do not exist in the region are automatically eliminated by the model. The primary sources for the IMPLAN data are *County Business Patterns*¹⁶ and Bureau of Economic Analysis (BEA) input-output benchmarks.¹⁷ Incorporated in input-output models, these data explain quantitative relationships between businesses and between businesses and final consumers. From these data, we can examine the effects of a change in one or several economic activities and predict its effect on a specific State, regional, or local economies (impact analysis).

IMPLAN also includes social accounting data (e.g., personal income and gross State product) that make it possible to measure non-industrial transactions, such as the payment of indirect taxes by

¹⁵ As would be expected, a great deal (considerably more than the indirect effect) of this income of employees is spent locally. This in turn becomes income to local business and individuals who provide goods and services to these employees. These successive rounds of spending continue to ripple through the economy and expand throughout the region. This phenomenon is commonly referred to as the "multiplier effect."

¹⁶ United States Census Bureau. <u>http://www.census.gov/econ/cbp/index.html</u>

¹⁷ The IMPLAN input-output accounts capture all monetary market transactions for consumption in a given time period. The IMPLAN input-output accounts are based on industry survey data collected periodically by the U.S. Bureau of Economic Analysis and follow a balanced account format recommended by the United Nations.

businesses and households. The IMPLAN database provides data for the entire United States by county and has the ability to incorporate user-supplied data at each stage of the model-building process to insure that estimates of economic impacts are both up-to-date and specific to an economic impact area. We consider IMPLAN to be superior to other multipliers for these reasons.

IMPLAN's Regional Economic Accounts and Social Accounting Matrices are used to construct local, county, or State-level multipliers specific to an impact area. As noted, these multipliers describe an economy's response to a change in demand or production. The multipliers allow economic impact analysis to move from a *descriptive* input-output model to a *predictive* model. Each business or industry that produces goods or services generates demand for other goods and services and this demand is multiplied through a particular economy until it dissipates through "leakage" to economies outside the specified area. Thus, multipliers calculate the response of the economic impact area to a change in demand or production.

IMPLAN models *discern and calculate leakage* from local, regional, and State economic areas based on workforce configuration, the inputs required by specific types of businesses, and the availability of these specific kinds of inputs in the economic area. ¹⁸ Economic impacts that accrue to other regions or States or countries as a consequence of a change in demand in the defined economic area are not counted as impacts within that economic area.

Within the defined economy, new businesses or industries can cause *substitution* and/or *displacement impacts*. The IMPLAN model adjusts for substitution and displacement impacts by deflating industry-specific multipliers to levels well below those recommended by the U.S. Bureau of Economic Analysis. In addition, multipliers are applied only to *personal disposable income* to obtain a more realistic estimate of the multiplier effects from increased demand.

A predictive model of impacts is constructed by specifying a series of new expenditures in a specific economic area, which is then applied to the industry multipliers for that particular region. Based on these calculations, the model estimates *final demand*, which includes employment, employee compensation (excluding benefits), and point-of-work personal income (including benefits).

The initial IMPLAN data detail all purchases in a given area, including all goods and services (including imported goods and services). Next, IMPLAN's *regional economic accounts* exclude imports to an economic area so the calculation of economic impacts identifies only those impacts specific to the economic impact area. IMPLAN makes this distinction by means of regional purchase coefficients (RPC), which predict regional purchases based on an economic area's particular characteristics. The regional purchase coefficient represents the proportion of goods and services that will be purchased regionally under normal circumstances, based on the area's economic characteristics described in terms of actual trade flows within the area.

CCA constructed input-output models for the State of Rhode Island using the IMPLAN Professional 3.0 model-building software and data packages. The data used in the models are for 2009 which is the latest available. Where necessary, all inputs were converted to current dollars using appropriate

¹⁸ Inputs that are essential to the business or industry but not available within the defined region will, necessarily, have to be imported from outside the region.

deflators (producer price indices for industrial commodities and the personal consumption expenditure deflator for personal income). Model outputs are reported in current dollars.

The economic impact of casino gaming in Massachusetts and the addition of table games at a casino facility's operations and capital expenditures may be estimated by changing the output of the appropriate industries in the econometric model (IMPLAN Code 409). This method assumes that a change in the casino's production function is the same as the average of the entire gaming industry in the area. CCA built an additional input-output model for the casino's proposed capital (renovation) spending. In both models, payments to business establishments within the region are distributed among industrial sectors by applying the model's regional purchase coefficient to purchases from those industries.

DIRECT IMPACTS ON THE LOCAL ECONOMY

To assess the direct wages and employment generated by the expansion of the new facility, CCA relied upon IMPLAN's estimates for a construction project of this size and CCA's estimates for changes in consumer spending under various scenarios. CCA estimated the employment and wages for Rhode Island VLT facilities from data obtained from Twin River and Newport Grand.

The proposed facility will generate new employment, income and final demand in Rhode Island. The mix of employment created and wages paid will change as the facility moves from the renovation to operational phase, but the analysis shows that these impacts continue through the five-year time horizon of this report.

CCA allocated employment and expenditures among the 440 IMPLAN industry sectors (account subcodes) by assigning gaming-related expenditures to IMPLAN sub-code 409 (amusement parks, arcades, and gambling industries). Construction expenditures were assigned to IMPLAN sub-code 36 (construction of other new nonresidential structures).

The IMPLAN modeling system can use final demand to generate direct employment and labor income estimates from the U.S. Bureau of Economic Analysis benchmark input-output accounts for Rhode Island. IMPLAN assumes that all construction is purchased from local contractors and suppliers provided that, based upon BEA data, there are suppliers of these services in the market.

INDIRECT AND INDUCED IMPACTS ON THE LOCAL ECONOMY

The IMPLAN modeling system is able to specify the distribution of indirect and induced impacts by sector by calculating the regional effect of construction upgrade purchases based on the BEA's inputoutput accounts for Rhode Island and by calculating the effect of increased consumer demand (employment) from gross State product data. The model predicts that indirect and induced impacts will be distributed widely across the State and that these impacts will be distributed across a majority of IMPLAN's 409 account sub-codes.

Gaming facility operations generate economic impacts that continue as long as the facility remains in operation. The IMPLAN modeling system uses U.S. Bureau of Labor Statistics earnings and income data and the U.S. Bureau of Economic Analysis Regional Economic Information System (REIS) to calculate place of work income. These estimates are based on direct employment estimates specific to the different aspects of a casino facility's operations and on actual compensation rates in the particular region and locality. The most significant indirect and induced impacts will occur in sectors that provide gaming facility-related inputs or that provide retail, health care, financial, and educational services to facility employees.

Employment is defined as total wage-and-salary employees and self-employed full and part-time jobs in a region. It includes both full-time and part-time workers. The data sets used to calculate total employment are the ES202 (county business patterns) and the Regional Economic Information System. Personal income is wages, benefits, and other income derived from employment linked geographically to the workplace site.

The direct, indirect, and induced impacts of adding tables at Twin River have been estimated on the basis of current earnings specific to Rhode Island VLT facilities and on the basis of a business profile specific to estimates of casinos in Rhode Island. In total, we estimate that Rhode Island table games will generate meaningful increases in jobs statewide for full and part-time persons, including those employed in various facets of the facility's operations, employment supported by local purchases made by the casino, and purchases made by those employed at the casino.

The occupational matrix of a casino is distributed among a wide variety of occupations and professions that require many different types and levels of skills. The facility operation requires changers, beverage servers, accountants, personnel managers, floor managers, repair and maintenance technicians, sound and lighting technicians, clerks, and security personnel, among other full and part-time job descriptions. The facility's general administrative services require computer systems analysts, accountants, financial analysts, risk analysts, and other professional managers.

TABLE GAME ECONOMICS

The micro-economics of table games and VLT operations differ considerably. In recent years technological innovations, such as bill acceptors and more recently the consumer acceptance of ticket-in ticket-out (TITO), bill changers, and player kiosks have greatly reduced the number of employees needed to staff a machine operation.

The operation of table games, however, has changed very little since Nevada's first casino opened in the 1930s. Table games are labor-intensive. In addition to the dealers, ¹⁹ the cash handling and accounting/surveillance aspects of table gaming (which are handled electronically in a machine operation) add significantly to the number of employees required to run a table operation. For example, there is usually a floor manager overseeing every four table games, and a pit boss overseeing every 10 to 12 games on the floor. Virtual table games, which from a labor expense side would eliminate most if not all of these positions, have yet to be embraced by the gambling consumer.

¹⁹ Some table games, including roulette and craps, require more than one dealer.

Furthermore, table games are still transacted with chips. Unlike VLT games, which typically are ticket-out transactions redeemable at self service kiosks, chips still have to be redeemed at the cage, with table/cage transactions reconciled daily.

In other words, for slot machine and video lottery terminal gaming the number of employees required is a fraction of the number of VLTs or slot machines, while the number of employees required per table game is a multiple (usually between five and six) of the actual number of table games.

In following series of exhibits, (4.1-4.7) CCA presents the direct, indirect, induced and total impacts of the proposed casino facility on the State of Rhode Island.

IMPACTS WITHIN RHODE ISLAND

Exhibits 4.1 through 4.7 present the direct, indirect, induced and total impacts associated with employment, wages and output at the present time and that will be generated for the Rhode Island economy under a series of scenarios (Best, Worst and Likely) as described below.

Baseline Economic Impact of Current VLT Gaming at Twin River and Newport Grand

Exhibit 4.1 presents the current (FY 2011) economic impacts (or contribution to Rhode Island's economy) of VLT operations at Twin River and Newport Grand. Net terminal income or the output of these facilities is \$492.6 million. The combined impact of direct, indirect and induced employment is 1,249 jobs and \$57.4 million in wages. The total economic contribution of spending across the various sectors of the Rhode Island economy including Twin River and Newport Grand is \$568.3 million.

Exhibit 4.1: FY 2011 Estimated Economic Impacts in Rhode Island from VLT Gaming

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	653	\$29,265,314	\$390,044,525	\$492,594,188
Indirect Effect	310	\$15,848,896	\$24,249,115	\$40,197,094
Induced Effect	286	\$12,311,370	\$22,162,013	\$35,551,823
Total Effect	1249	\$57,425,580	\$436,455,654	\$568,343,105
Source: Christiansen Capital Advisors, Ll	LC			

The Economic Impact of Massachusetts Casinos on VLT Gaming in Rhode Island without Table Gaming at Twin River

In this section we analyze the negative impacts on the Rhode Island economy of casinos in Massachusetts if table games are not allowed at Twin River (i.e. the November 2012 referendum fails).

As one would expect, the economic impact of any business (gaming or otherwise) can change over time. Industries that are growing will typically increase spending on intermediate goods and hire more employees, thus the economic impacts will increase over time. The converse is also true. An industry in a state of decline will typically scale back expenditures on intermediate goods and reduce the number of employees, thus the economic impact of that industry will decrease over time. In our case, both will occur. As detailed in Section 3, the industry we analyze in this report (VLT gaming in the State of Rhode Island) is about to undergo a sea change. Industry sales (or gaming revenue) will increase (as will the associated economic impacts) over the next few years until competition comes on line in Massachusetts (FY 2015 through FY 2016) when gaming revenue and the associated economic impacts of this industry in the State of Rhode Island will start to contract.

Thus, we believe that the appropriate way to measure and present the projected changes in the economic impacts of gaming in Rhode Island is by conducting a "before and after" analysis. In other words, we compare the estimated FY 2011 economic impacts of gaming in Rhode Island with the projected economic impacts of gaming in Rhode Island in FY 2017 under the various scenarios presented in Section 3. ²⁰ Exhibits 4.2 through 4.7 present the results of this "before and after" analysis.

Exhibit 4.2 presents the negative economic impacts on the Rhode Island economy associated with the introduction of casino gaming (including table games) in Massachusetts under the Best Case scenario: Massachusetts casinos are located at Suffolk Downs in East Boston, New Bedford and in western Massachusetts and a racino is located at Raynham Park in Raynham. Exhibit 4.2 presents the *least* impact of Massachusetts gaming on the Rhode Island economy. Under this scenario, Rhode Island total employment would decline by 193 jobs and there would be a loss of \$8.9 million in total wages. There would be a loss of \$88.3 million in total goods and services generated in Rhode Island including the loss of net terminal income at Twin River and Newport Grand (see Exhibit 3.2).

_	Best	Impact Type	Employment	Labor Income	Value Added	Output
		Direct Effect	-101	-4,518,408	-60,220,785	-76,594,188
		Indirect Effect	-48	-2,446,985	-3,743,933	-6,206,216
		Induced Effect	-44	-1,900,810	-3,421,696	-5,489,011
		Total Effect	-193	-8,866,202	-67,386,416	-88,289,415
						_
ource	: Christians	en Capital Advisors, LLO	0			

Exhibit 4.2: FY 2017 Economic Impacts on Rhode Island of Massachusetts Casinos (Best Case)

Exhibit 4.3 provides the negative economic impacts on the Rhode Island economy associated with the introduction of casino gaming (including table games) in Massachusetts under the Worst Case scenario: Massachusetts casinos are located in Foxboro, New Bedford and western Massachusetts and a racino is located at Plainridge Racecourse in Plainville. Exhibit 4.3 presents the most severe impact of Massachusetts gaming on the Rhode Island economy. In this worst case scenario, Rhode Island

²⁰ To recap, those scenarios are six in total. The impact of Massachusetts casinos (best, worst, and likely cases) without table games at Twin River, and the impact of Massachusetts casinos (best, worst and likely cases) with 65 tables at Twin River.

total employment would decline by 397 jobs and there would be a loss of \$18.2 million in total wages. There would be a loss of \$175.9 million in total goods and services generated in Rhode Island including the loss of net terminal income at Twin River and Newport Grand (see Exhibit 3.5).

hibit 4.3: FY 2017 Economic Impacts on Rhode Island of Massachusetts Casinos (Worst Case)								
Worst	Impact Type	Employment	Labor Income	Value Added	Output			
	Direct Effect	-207	-9,295,275	-123,886,281	-151,894,188			
	Indirect Effect	-99	-5,033,940	-7,702,025	-12,767,436			
	Induced Effect	-91	-3,910,348	-7,039,118	-11,292,001			
	Total Effect	-397	-18,239,563	-138,627,425	-175,953,625			

Exhibit 4.4 provides the negative economic impacts on the Rhode Island economy associated with the introduction of casino gaming (including table games) in Massachusetts under the Likely Case scenario: Massachusetts casinos are located at Suffolk Downs in East Boston, in Middleborough and in western Massachusetts and a racino is located at Plainridge Racecourse in Plainville. Exhibit 4.4 presents the probable impact of Massachusetts gaming on the Rhode Island economy. In this likely case scenario, Rhode Island total employment would decline by 319 jobs and there would be a loss of \$14.7 million in total wages. There would be a loss of \$145.6 million in total goods and services generated in Rhode Island including the loss of net terminal income at Twin River and Newport Grand (see Exhibit 3.8).

Exhibit 4.4: Negative Economic Impacts of Massachusetts Casinos on the Rhode Island Economy (Likely Case)

Likely	Impact Type	Employment	Labor Income	Value Added	Output
	Direct Effect	-167	-7,474,950	-99,625,208	-126,294,188
	Indirect Effect	-79	-4,048,127	-6,193,711	-10,267,145
	Induced Effect	-73	-3,144,571	-5,660,624	-9,080,650
	Total Effect	-319	-14,667,647	-111,479,544	-145,641,983
ource: Christians	en Capital Advisors, LL	C			

The Economic Impact of Massachusetts Casinos on VLT Gaming in Rhode Island with Table Gaming at Twin River

In this section, we analyze the net impacts on the Rhode Island economy if table games are allowed at Twin River (i.e. the November 2012 referendum passes) under our three Massachusetts casinos scenarios.

The methodology here is the same as in the previous three exhibits, which shows a "before and after" analysis of the change in the economic impacts of gaming in Rhode Island. In other words, we

compare the estimated FY 2011 economic impacts of gaming in Rhode Island with the projected economic impacts of gaming in Rhode Island in FY 2017. The only difference is that in the following exhibits we have analyzed those impacts *with* table games at Twin River.

Exhibit 4.5 presents the difference between the "Best Case" scenario (for Massachusetts competition) and the Baseline (or current) scenario (Exhibit 4.1) if table games are added to Twin River. To recap, this best case scenario assumes Massachusetts casinos are located at Suffolk Downs in East Boston, in New Bedford, and in western Massachusetts and a racino is located at Raynham Park in Raynham. In this best case scenario, there would be an additional 365 jobs statewide and an additional \$16.1 million in statewide wages. There would however, only be \$2.2 million in additional statewide goods and services (output) generated as the result of table game operations at Twin River including the loss of net terminal income at Twin River and Newport Grand (see Exhibit 3.10). This may seem counter-intuitive but it is not. As described earlier in this report, a VLT business and a table game business have fundamentally different micro-economic structures. Tables are labor intensive, VLTs are not. That is why output, which is primarily driven by the decrease in gross gaming revenue and the associated decline in purchases by the firm, can be going in one direction, while employment and the increases in purchases by employees can be going in the opposite direction.

To maintain consistency throughout this section, we have anchored all our results to the FY 2011 estimated economic impacts, but another way to look at these impacts would be to compare them to the same competitive case without table games at Twin River — in other words, a comparison of the results from Exhibit 4.5 and 4.2. What this comparison shows is that with table games at Twin River, a statewide employment decline of 193 (Exhibit 4.2) becomes a statewide employment gain of 365 from the baseline (or current) employment.

Best	Impact Type	Employment	Labor Income	Value Added	Output
	Direct Effect	184	\$7,460,421	-\$26,613,348	-\$20,794,188
	Indirect Effect	102	\$5,195,964	\$7,948,693	\$13,176,443
	Induced Effect	80	\$3,431,653	\$6,096,718	\$9,821,998
	Total Effect	365	\$16,088,038	-\$12,567,939	\$2,204,254
ource: Christianse	en Capital Advisors, LLC				

Exhibit 4.5: Net Economic Impacts of Twin River Table Games (Best Case)

Exhibit 4.6 presents the difference between the "Worst Case" scenario (for Massachusetts competition) and the Baseline (or current) scenario if table games are added to Twin River. To reiterate, this worst case scenario assumes Massachusetts casinos are located in Foxboro, New Bedford, and western Massachusetts and a racino is located at Plainridge Racecourse in Plainville. In this worst case scenario the addition of table games at Twin River will still lead to declines from the FY 2011 estimated economic impacts: In the worst case scenario with table games at Twin River, there would be a loss of 118 jobs statewide and \$5.8 million in statewide wages. There would be a decline of \$136.0 million in statewide goods and services (output) from the baseline including the loss of net terminal income at Twin River and Newport Grand (see Exhibit 3.12).

This is still markedly better than if the November 2012 referendum fails. By comparing the results from Exhibits 4.3 and 4.6, a statewide employment decline of 397 (Exhibit 4.3) is cut by more than two-thirds with table games at Twin River to an employment decline of 118 (Exhibit 4.6).

				Output
Direct Effect	-65	-\$3,320,036	-\$108,710,354	-\$130,894,188
Indirect Effect	-24	-\$1,206,950	-\$1,847,286	-\$3,062,137
Induced Effect	-29	-\$1,246,733	-\$2,285,541	-\$3,645,052
Total Effect	-118	-\$5,773,717	-\$112,843,182	-\$137,601,377

Exhibit 4.6: Net Economic Impacts of Twin River Table Games (Worst Case)

Exhibit 4.7 presents the difference between the "Likely Case" scenario (for Massachusetts competition) and the Baseline (or current) scenario if table games are added to Twin River. To recap, this likely case scenario assumes Massachusetts casinos are located at Suffolk Downs in East Boston, in Middleborough and in western Massachusetts and a racino is located at Plainridge Racecourse in Plainville. In this likely case scenario, there would be a gain of 201 jobs statewide and an additional \$8.6 million in statewide wages over and above the baseline or current economic impacts. However,, there would be a loss of \$61.1 million in economic activity (statewide goods and services), including the loss of net terminal income at Twin River and Newport Grand (see Exhibit 3.14), from the baseline even with table operations at Twin River.

As in all the above scenarios, this is markedly better than if the November 2012 referendum fails. By comparing the results from Exhibits 4.4 and 4.7, a statewide employment decline of 319 (Exhibit 4.4) is converted to an employment gain of 201 from the baseline levels (Exhibit 4.7).

Likely	Impact Type	Employment	Labor Income	Value Added	Output
	Direct Effect	99	\$3,676,201	-\$68,032,049	-\$73,994,188
	Indirect Effect	60	\$3,063,910	\$4,686,697	\$7,769,114
	Induced Effect	42	\$1,818,728	\$3,199,023	\$5,170,59
	Total Effect	201	\$8,558,839	-\$60,146,331	-\$61,054,48

Exhibit 4.7: Net Economic Impacts of Twin River Table Games (Likely Case)

Source: Christiansen Capital Advisors, LLC

The Economic Impact of \$9.5 Million Construction and Renovations at Twin River

Exhibit 4.8 presents the economic impact or contribution to the Rhode Island economy resulting from the expenditure of \$9.5 million for renovations at Twin River associated with the addition of 65 table games. Such renovation would generate an additional 127 state-wide jobs and an additional \$6.4 million in total state-wide wages. It would generate an additional \$16.3 million in goods and services (output) including the \$9.5 million cost directly tied to the Twin River renovation.

Exhibit 4.8: Economic Impacts of Construction/Renovation Associated with the Introduction of Table Games at Twin River

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	74	\$3,834,975	\$4,353,755	\$9,500,000
Indirect Effect	21	\$1,147,935	\$1,676,544	\$2,854,815
Induced Effect	32	\$1,383,174	\$2,472,815	\$3,974,629
Total Effect	127	\$6,366,083	\$8,503,114	\$16,329,444

Source: Christiansen Capital Advisors, LLC

TWIN RIVER HOTEL AND CONVENTION FACILITIES EXPANSION SCENARIOS

CCA was also asked to provide five year projection of gross gaming revenue including net terminal income for Twin River and Newport Grand, the implications of gaming in Massachusetts for the successful operation of each facility, and an economic impact analysis for the Rhode Island economy including the impact on Providence's and Newport's leisure and hospitality industries, if Twin River were to add a hotel and convention facilities both with and without gaming in Massachusetts.

In the process of conducting research for this report Twin River revealed that it had no plans to add convention and/or hotel facilities. In order to project the impact of hotel/convention facilities on gross gaming revenues, and the impact on the regional economy of such a development, the size and scope of said hotel/convention facilities is a necessary starting point. The only alternative to being provided this necessary information is to conduct an analysis of the feasibility of a hotel/convention facility at Twin River, which is beyond the scope of this report.

5. Value of an IGRA Casino located within 50 miles of Twin River

CCA was asked to estimate the net present and future value to a Native American tribe of an Indian Gaming Regulatory Act (IGRA) casino located within 50 miles of Twin River based on the near-term passage by Congress of the "*Carcieri* fix" ²¹ utilizing best and worst case estimates of the calendar time that would elapse for the United States Interior Department to take land into trust for the purpose of an IGRA-authorized casino in Rhode Island.

In order to assess the net present and future value of an IGRA casino located within 50 miles of Twin River, we utilized the models for the most likely competitive case in Massachusetts (Section 2), and identified areas of the State of Rhode Island that are relatively near major traffic arteries and would remain under-served once competition from Massachusetts comes online.

This analysis revealed two optimal locations for a Rhode Island IGRA casino: Warwick and East Providence, Rhode Island.

The revenue potential of an IGRA casino in either location is almost exactly the same, although the impacts an IGRA casino would have on Rhode Island's two gaming facilities are very different between these two locations. For example, an IGRA casino in East Providence would have a much greater impact on Newport Grand than an IGRA casino in the Warwick location, which would have a greater impact on Twin River. The total impacts (on Newport Grand and Twin River combined) are, however, very similar with either location, a finding that is certainly relevant to the State of Rhode Island.

With the new gaming competition from Massachusetts, our models show that slightly more than half (53.0 percent) of the gaming revenue derived from an IGRA casino at either of these sites would come directly at the expense of Twin River and Newport Grand. Since the purpose of this analysis is to focus on the value to a tribe of an IGRA casino located within 50 miles of Twin River, and not its impacts upon existing Rhode Island facilities, and because this value will not differ materially from one location to the other, we have in the interest of efficiency focused on the Warwick location.

Exhibit 5.1 presents our model for potential gaming revenue for an IGRA casino located within 50 miles of Twin River. As in Section 2, we have generated separate models for table games and slot machines, which have slightly different consumer attraction factors. Our use of separate models for table games and gaming machines is particularly important in valuing a Rhode Island IGRA casino because in this case we are modeling a market containing properties offering slot machines and table games as well as properties offering slot machines only (Newport Grand and Massachusetts' one racino).

²¹ United States Supreme Court, *Carcieri v. Salazar*, No. 07-526 (2009).

		Slots Distance, Income,		Actual	
Distance Range	Adult Population	and Competitive Factors	Spendir Base	ng Spending per Person	Total Revenues (\$M)
0-10	449,471	47.9%	\$640.0	0 \$306.82	\$137.9
10-25	639,828	2.2%	\$640.0	0 \$13.79	\$8.8
25-50	2,745,854	0.0%	\$640.0	0 \$0.00	\$0.0
50-75	2,920,775	0.0%	\$640.00 \$0.00		\$0.0
75-100	1,757,500	0.0%	\$640.0	0 \$0.00	\$0.0
Out	of Market	2.0%			2.9
Total	8,513,428				\$149.7
		Tables Distance, Income,			
Distance Range	Adult Population	and Competitive Factors	Spending Base	Actual Spending per Person	Total Revenues (\$M)
0-10	449,471	43.1%	\$81.58	\$40.26	\$18.1
10-25	639,828	14.6%	\$81.58	\$13.65	\$8.7
25-50	2,745,854	1.9%	\$81.58	\$1.79	\$4.9
50-75	2,920,775	0.4%	\$81.58	\$0.34	\$1.0
75-100	1,757,500	0.1%	\$81.58	\$0.09	\$0.2
Out of	Market	2.0%			0.7
Total	8,513,428				\$33.6
Total (Gaming Revenue				\$183.3
rce: Christiansen Capit	al Advisors, LLC.				

Exhibit 5.1 indicates that the base year GGR for an IGRA casino in Warwick, Rhode Island would be \$183.3 million. Of this amount slot machines would generate \$149.7 million and table games would

CCA was asked to estimate the value of this Rhode Island IGRA casino based upon the assumption of the near-term passage by the Congress of the "*Carcieri* fix." ²² *Carcieri* v. *Salazar* is a recent (decided 2009) U.S. Supreme Court case in which the Court held that the Secretary of the Interior cannot take land into trust for tribes that were not under Federal jurisdiction as of 1934. The Narragansett, along with a number of other tribes, were not under federal jurisdiction as of 1934. The *Carcieri* decision has, thus, made it impossible for the Narragansett and other similarly-situated tribes to get land placed in trust by the Secretary of the Interior. Following the Court's decision, several bills have been introduced in the United States House of Representatives and the United States Senate to "fix" the *Carcieri* decision and allow the Secretary of the Interior to take Indian lands into trust for all eligible

Exhibit 5.1 Revenue Potential of Warwick IGRA casino

generate \$33.6 million.

²² United States Supreme Court, *Carcieri v. Salazar*, No. 07-526 (2009). In *Carcieri v. Salazar* the Court determined that the authority of the Bureau of Indian Affairs (BIA) to take land into a trust status for tribes hinged on the phrase "now under Federal jurisdiction" in 25 U.S.C. § 479. The Court determined that this phrase limited the BIA to take Indian land into trust only for tribes under federal jurisdiction as of 1934; the time of the law's enactment. This ruling currently excludes the Narragansett tribe from turning land over to the Department of the Interior as they were not under federal jurisdiction in 1983.

tribes. There is, however, significant opposition to any legislative "fix" from elected officials; 17 State Attorneys General have written an opinion opposing such legislation. ²³

As of the writing of this report, no Federal legislation has been enacted that would alter the *Carcieri* decision. Even assuming the near-term passage of a *Carcieri* "fix," however, the State of Rhode Island is required by law and the terms of a contract with the owners of Twin River to "exhaust all of [the State's] administrative and judicial remedies to oppose the taking or conversion of land in Rhode Island into trust...where such taking or conversion is for the purpose of gaming under IGRA" if the State is to avoid having to pay "slippage protection" to Twin River. ²⁴ In July of 2005, the State entered into a contract with UTGR, Inc. (the owners of Twin River prior to the bankruptcy reorganization) ²⁵ that, among other things, instituted a "slippage agreement" ²⁶ between UTGR and the State that reduces Rhode Island's share of gaming revenue in the case that another "gaming facility" including "facilities or venues operated pursuant to IGRA" open in the State. ²⁷

Thus it would appear that in the best case, passage of a *Carcieri* "fix" in 2012, the timeline for construction of a Rhode Island IGRA casino would proceed roughly as follows: the Narragansett Tribe would again apply to the Secretary of the Interior to take land in Rhode Island into trust. The Secretary would evaluate the Tribe's application over the course of a couple of years. The State would oppose the conversion of land into trust both administratively and in court as required by law. While it is hard to tell how long such a challenge could drag on, the last such challenge by the State lasted 10 years. ²⁸ If the Tribe and the Secretary were ultimately successful in taking land into trust, it would be only the first step. In order to open a casino in the State of Rhode Island, the Narragansett Tribe would have to negotiate a compact for gambling with the State of Rhode Island, which could take an additional 3-5 years. Assuming that the Narragansett Tribe eventually enters into a compact with the State, another two years would probably elapse before an IGRA casino actually opened in the State of Rhode Island.

²⁶ *Ibid.* Section 6.

²⁷ Ibid.

²³ A Communication from the Chief Legal Officers of the Following States and Territories: Alaska, Colorado, Connecticut, Florida, Hawaii, Iowa Kansas, Massachusetts, Michigan, Mississippi, Ohio, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, and Utah. April 24, 2009.

²⁴ 2005 P.L. Ch. 322, section 2.

²⁵ Master Video Lottery Terminal Contract by and between the Division of Lotteries of the Rhode Island Department of Administration and UTGR, Inc. July 18, 2005.

²⁸ In 1997, the Narragansett Tribe requested the Secretary of the Interior to take a 31-acre parcel into trust. The Bureau of Indian Affairs (BIA) notified the State of Rhode Island of its intention to take the parcel into trust in 1998. The State filed an appeal with an administrative appeal arm of the BIA (the IBIA) which affirmed the BIA's decision in 2000. The State then appealed the IBIA's decision to the federal district court in Rhode Island, which again affirmed the BIA's decision in 2003. The State appealed the district court's decision to the First Circuit court of Appeals in Boston, which issued two decisions again affirming the BIA's decision, one in 2005, and then another (*en banc*) in 2008. The State appealed the First Circuit's ruling to the United States Supreme Court, which issued a decision in favor of the State in 2009. United States Supreme Court, *Carcieri v. Salazar*, No. 07-526 (2009).

Thus, assuming passage of a *Carcieri* "fix" in the next Congress, the best case estimates for an IGRA casino to open in Rhode Island is sometime in 2029. The worst case estimate is 2031.

THE NET PRESENT VALUE OF AN IGRA CASINO—BEST CASE

To assign a specific value to a theoretical IGRA casino, CCA performed a discounted cash flow analysis of projected gaming revenues. Utilizing the revenue potential projections presented in Exhibit 5.1 and inflating them at the rate of 2.5 percent per annum to adjust for organic growth in population and per capita income and general inflationary trends, we have generated estimates of gross gaming revenue assuming a 2029 opening date. As discussed in Section 2, the demand analysis returns Base Year projections. Thus, as we have in all revenue projections in this report, we have adjusted these projections to reflect a three year maturation period for the theoretical IGRA casino. Furthermore, we have assumed that the Tribal Share of gaming revenue would be 12.5 percent. According to the financial filings of the Mohegan Tribal Gaming Authority over the past three years approximately 5.0 percent of gaming revenue was distributed to the tribe. We are aware, however, of other IGRA casinos that contribute as much as 20.0 percent back to the tribe (most of which are managed by the tribe rather than a management company). Thus, we have chosen the midpoint, 12.5 percent, to estimate the tribal share.

We assumed a weighted average cost of capital (WACC) of 9.3 percent (the recent average of several publicly traded companies that own casinos) and applied this as our discount rate. ^{29 30}

The results are presented in Exhibit 5.2. Utilizing the assumptions described above, we estimate that the current or net present value of an IGRA casino located within 50 miles of Twin River is approximately \$65.5 million.

WACC = Re x E/V + Rd x (1 - Tc) x D/V

Where:

Re = cost of equity Rd = cost of debt E = market value of the firm's equity D = market value of the firm's debt V = E + D E/V = percentage of financing that is equity D/V = percentage of financing that is debt Tc = corporate tax rate

³⁰ Whereas cost of debt is relatively easy to calculate (the blended rate the company pays on its various debt instruments). The cost of equity is somewhat less precise; to estimate the cost of equity for each of these companies, CCA employed the widely used and Noble Prize winning Capital Asset Pricing Model ("CAPM") (developed by William Sharpe, Harry Markowitz and Merton Miller). In this model, the cost of equity (Re) is calculated as:

 $Re = Rf + \beta(Rm-Rf).$

Where:

Rf – Risk-free rate - This is the rate obtained from investing in securities considered free from credit risk, such as government bonds. CCA has used the prevailing interest rate of U.S. Treasury Bills as a proxy for the risk-free rate.

 β - This measures how company's share price reacts against the market as a whole, or its volatility. A beta of one, for instance, indicates that the company moves in line with the market. If the beta is in excess of one, the share is exaggerating the market's movements; less than one means the share is more stable than the overall market.

(Rm - Rf) = Equity Market Risk Premium - The equity market risk premium represents the returns investors expect to compensate them for taking extra risk by investing over and above the risk-free rate. In other words, it is the difference between the risk-free rate and the market rate.

²⁹ A calculation of a firm's cost of capital in which each category of capital is proportionately weighted. All capital sources - common stock, preferred stock, bonds and any other long-term debt - are included in a WACC calculation. WACC is calculated by multiplying the cost of each capital component by its proportional weight and then summing:

5.2 Net Present Value to the Tribe (\$ Millions) —Best Case

fear	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	204
Gaming Revenue	\$224.8	\$263.8	\$299.8	\$307.3	\$314.9	\$322.8	\$330.9	\$339.1	\$347.6	\$356.3	\$365.2	\$374.4
Tribal Share	\$28.1	\$33.0	\$37.5	\$38.4	\$39.4	\$40.4	\$41.4	\$42.4	\$43.5	\$44.5	\$45.7	\$46.8
Free Cash Flow	\$28.1	\$33.0	\$37.5	\$38.4	\$39.4	\$40.4	\$41.4	\$42.4	\$43.5	\$44.5	\$45.7	\$46.
PV Factor	11.8%	10.8%	9.9%	9.1%	8.3%	7.6%	6.9%	6.4%	5.8%	5.3%	4.9%	4.49
PV of Cash Flow	\$6.2	\$6.7	\$6.9	\$6.5	\$6.1	\$5.7	\$5.3	\$5.0	\$4.7	\$4.4	\$4.1	\$3.
Cumulative PV	\$6.2	\$12.9	\$19.8	\$26.3	\$32.3	\$38.0	\$43.4	\$48.4	\$53.1	\$57.5	\$61.7	\$65.
Net Present Value of Cash Flows \$65.	5											

Source: Christiansen Capital Advisors, LLC.

THE NET PRESENT VALUE OF AN IGRA CASINO—WORST CASE

In estimating the worst-case current value (net present value) of an IGRA casino located within 50 miles of Twin River, we utilized all the same assumptions as in the best case with the exception of the opening date, which we have moved to 2031. In other words, the revenue potential projections presented in Exhibit 5.1 are inflated at the rate of 2.5 percent per annum; we have adjusted these projections to reflect a three-year maturation period for the theoretical IGRA casino after it opens; and we have assumed a Tribal Share of 12.5 percent and a discount rate of 9.3 percent.

The results are presented in Exhibit 5.3; utilizing the assumptions described above, we estimate that the worst-case current or net present value of an IGRA casino located within 50 miles of Twin River is approximately \$46.3 million.

5.3 Net Present	Value to the Tribe	(\$ Millions)	-Worst Case
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Year	203	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Gaming Revenue	\$236.2	2 \$277.1	\$314.9	\$322.8	\$330.9	\$339.1	\$347.6	\$356.3	\$365.2	\$374.4	\$383.7	\$393.3
Tribal Share	-	-	\$39.4	\$40.4	\$41.4	\$42.4	\$43.5	\$44.5	\$45.7	\$46.8	\$48.0	\$49.2
Free Cash Flow	\$0.	\$0.0	\$39.4	\$40.4	\$41.4	\$42.4	\$43.5	\$44.5	\$45.7	\$46.8	\$48.0	\$49.2
PV Factor	9.9%	9.1%	8.3%	7.6%	6.9%	6.4%	5.8%	5.3%	4.9%	4.4%	4.1%	3.7%
PV of Cash Flow	-	-	\$6.1	\$5.7	\$5.3	\$5.0	\$4.7	\$4.4	\$4.1	\$3.9	\$3.6	\$3.4
Cumulative PV	-	-	\$6.1	\$11.8	\$17.1	\$22.2	\$26.9	\$31.3	\$35.4	\$39.3	\$42.9	\$46.3
Net Present Value of Cash Flows \$	46.3											

In summary, assuming a *Carcieri* "fix" is passed in the next Congress, and that the State's opposition to the conversion of land into trust successfully delays the Tribe and the Secretary from taking land into trust for 10 years; compact negotiations take 3-5 years; two years for the casino build; a 9.3 percent discount rate; a 12.5 percent Tribal share of gaming revenues; and a 2.5 percent general economic growth rate, the net present value of an IGRA casino located within 50 miles of Twin River is between \$46.3 million and \$65.5 million.

The projections presented herein are based upon the accompanying assumptions. Some of these assumptions will inevitably not materialize, and unanticipated events and circumstances will occur. Actual results may therefore vary from our projections, and such variations may be material.


250 West 57th Street Suite 432 New York, NY 10107 Phone: 212.779.9797 Fax: 212.779.9809 Email: cca-ny@verizon.net

170 Sawyer Road New Gloucester, ME 04260 Phone: 207.688.4500 Fax: 207.926.5612 Email: <u>stsinc@gwi.net</u>

Gaming Study and Economic Impact Analysis

APPENDIX A: ALTERNATIVE SCENARIOS

Prepared by: Christiansen Capital Advisors, LLC Prepared for: The Rhode Island Department of Revenue

ALTERNATIVE SCENARIO #1, IMPACT WITHOUT TABLE GAMES AT TWIN RIVER: MASSACHUSETTS COMPETITION: PLAINRIDGE, WESTERN MASSACHUSETTS, SUFFOLK DOWNS AND NEW BEDFORD

In this Appendix, we present additional scenarios for gaming in Massachusetts, assuming other alternative locations for Massachusetts casinos and the one racino, other than those presented in the main body of this report (the best, worse and likely cases). As described in the main body of this report, after running several models, we found that the currently proposed locations for the casino destined for Western Massachusetts do not vary a great deal in terms of their impact on gaming in Rhode Island, thus we have not run multiple iterations of possible Western Massachusetts locations.

Exhibit A.2 presents our estimates of the impacts of gaming in Massachusetts on Rhode Island VLT revenue under the following scenario: Massachusetts casinos located at, Suffolk Downs in East Boston, in New Bedford and in Western Massachusetts and a racino at Plainridge Racecourse in Plainville. We project gaming revenue will decline from a peak of \$545.1 million in FY 2014 to \$358.3 million by FY 2017, a decline of 34.3 percent. The State's share of this revenue will decline from a peak of \$336.6 million in FY 2014 to \$221.3 million in FY 2017.



Exhibit A.1: Scenario # 1 Map

Source: Rhode Christiansen Capital Advisors

Exhibit A.2: Scenario # 1 Revenue Projections w/o Table Games at Twin River

GGR (in millions)	2012	2013	2014	2015	2016	2017	CAGR
Twin River	\$ 470.0	\$ 487.9	\$ 495.2	\$ 436.1	\$ 363.4	\$ 334.6	-5.8%
Newport Grand	\$ 47.5	\$ 48.7	\$ 49.9	\$ 44.6	\$ 28.1	\$ 23.7	-10.0%
Rhode Island Gaming Revenue	\$ 517.5	\$ 536.6	\$ 545.1	\$ 480.7	\$ 391.5	\$ 358.3	-6.2%
State Revenue (in millions)	2012	2013	2014	2015	2016	2017	CAGR
Twin River	\$ 285.2	\$ 301.5	\$ 306.0	\$ 269.5	\$ 224.6	\$ 206.8	-5.5%
Newport Grand	\$ 29.5	\$ 29.8	\$ 30.5	\$ 27.3	\$ 17.2	\$ 14.5	-10.2%
Rhode Island Gov't Revenue	\$ 314.7	\$ 331.3	\$ 336.6	\$ 296.8	\$ 241.8	\$ 221.3	-5.9%

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.



Exhibit A.3 summarizes and expresses in graphic format the results presented in Exhibit A.2.

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #2, IMPACT WITHOUT TABLE GAMES AT TWIN RIVER: MASSACHUSETTS COMPETITION: SUFFOLK DOWNS, MIDDLEBORO, TAUNTON/RAYNHAM PLUS WESTERN MASSACHUSETTS

Exhibit A.5 presents our estimates of the impacts of gaming in Massachusetts on Rhode Island VLT revenue under the following scenario: Massachusetts casinos located at Suffolk Downs in East Boston, in Middleboro and in Western Massachusetts and a racino at Raynham Park in Raynham. We project gaming revenue will decline from a peak of \$557.5 million in FY 2014 to \$410.9 million by FY 2017, a decline of 26.3 percent. The State's share of this revenue will decline from a peak of \$340.6 million in FY 2014 to \$250.9 million in FY 2017.

Exhibit A.4: Scenario # 2 Map



Source: Rhode Christiansen Capital Advisors

Exhibit A.5: Scenario # 2 Revenue Projections w/o Table Games at Twin River

GGR (in millions)		2012	2013	2014		2015	2016	2017	CAGR
Twin River	\$	470.0	\$ 487.9	\$ 507.6	\$	472.9	\$ 406.0	\$ 385.7	-3.6%
Newport Grand	\$	47.5	\$ 48.7	\$ 49.9	\$	45.8	\$ 29.3	\$ 25.2	-9.4%
Rhode Island Gaming Revenue	\$	517.5	\$ 536.6	\$ 557.5	\$	518.7	\$ 435.3	\$ 410.9	-4.1%
State Revenue (in millions)		2012	2013	2014		2015	2016	2017	CAGR
Twin River	\$	285.2	\$ 297.6	\$ 309.6	\$	288.4	\$ 247.7	\$ 235.3	-3.5%
Newport Grand	\$	29.5	\$ 30.2	\$ 30.9	\$	28.4	\$ 18.1	\$ 15.6	-9.4%
Rhode Island Gov't Revenue	Ś	314.7	\$ 327.8	\$ 340.6	Ś	316.9	\$ 265.8	\$ 250.9	-4.1%

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

Exhibit A.6 summarizes and expresses in graphic format the results presented in Exhibit A.5.



Exhibit A.6: Scenario #2 Revenue Projections w/o Table Games at Twin River

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #3, IMPACT WITHOUT TABLE GAMES AT TWIN RIVER: MASSACHUSETTS COMPETITION: MILFORD, NEW BEDFORD, PLAINRIDGE PLUS WESTERN MASSACHUSETTS

Exhibit A.8 presents our estimates of the impacts of gaming in Massachusetts on Rhode Island VLT revenue under the following scenario: Massachusetts casinos located in Milford, New Bedford, and Western Massachusetts and a racino at Plainridge Racecourse in Plainville. We project gaming revenue will decline from a peak of \$557.51 million in FY 2014 to \$353.0 million by FY 2017, a decline of 36.7 percent. The State's share of this revenue will decline from a peak of \$344.2 million in FY 2014 to \$218.0 million in FY 2017.

Exhibit A.7: Scenario # 3 Map



Source: Rhode Christiansen Capital Advisors

Exhibit A.8: Scenario # 3 Revenue Projections w/o Table Games at Twin River

GGR (in millions)		2012	2013	2014		2015	2016	2017	CAGR
Twin River	\$	470.0	\$ 487.9	\$ 507.6	\$	436.1	\$ 359.1	\$ 329.4	-6.0%
Newport Grand	\$	47.5	\$ 48.7	\$ 49.9	\$	44.6	\$ 28.0	\$ 23.6	-10.1%
Rhode Island Gaming Revenue	\$	517.5	\$ 536.6	\$ 557.5	\$	480.7	\$ 387.1	\$ 353.0	-6.4%
State Revenue (in millions)		2012	2013	2014		2015	2016	2017	CAGR
Twin River	\$	285.2	\$ 301.5	\$ 313.7	\$	269.5	\$ 221.9	\$ 203.6	-5.7%
Newport Grand	\$	29.5	\$ 29.8	\$ 30.5	\$	27.3	\$ 17.1	\$ 14.5	-10.2%
Rhode Island Gov't Revenue	Ś	314.7	\$ 331.3	\$ 344.2	Ś	296.8	\$ 239.1	\$ 218.0	-6.1%

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.



Exhibit A.9: Scenario #3 Revenue Projections w/o Table Games at Twin River

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #4, IMPACT WITHOUT TABLE GAMES AT TWIN RIVER: MASSACHUSETTS COMPETITION: MILFORD, MIDDLEBORO, PLAINRIDGE PLUS WESTERN MASSACHUSETTS

Exhibit A.11 presents our estimates of the impacts of gaming in Massachusetts on Rhode Island VLT revenue under the following scenario: Massachusetts casinos located in Milford, Middleboro, and Western Massachusetts and a racino at Plainridge Racecourse in Plainville. We project gaming revenue will decline from a peak of \$557.5 million in FY 2014 to \$360.9 million by FY 2017, a decline of 35.3 percent. The State's share of this revenue will decline from a peak of \$344.2 million in FY2 014 to \$222.9 million in FY 2017.

Exhibit A.10: Scenario # 4 Map

Hinsdale FRANKLIN 122 8 Shutesbury WORCESTER Stow MIDDLESEX Lynn 8 Becket HAMPSHURE 202 Oakham Mariborough Arlington Revere 20 Northampton Western Facility Worcester Framingham Needham Hingham	Gulf of Maine
TAMPOEN Ludiow Oxford Milford NORFOLK Weymouth Francisco Stafford Woonsocket Cumberland 2 3 Provincetow	Atlantic Truro Ocean
44 HARTFORD 84 Pascoag AttraTwin River Taunto Middleboro Simsbury Windsor Tolland Danielson Providence Tast Providence Wareham Bre	Vellflegt Eastham ewster Orleans
Bristol 10 East Hartford Willimantic RHODE ISCAND Bristol New Bedford Instable 8 Britain Glastonbury Lebanon KENT Warwick Fail Dom Stable Dom Stable 9 Britain Jewett (Mohegan Sungstown North Tiverton River New 28 West Waterbury Middlefown Norw Foxwoods Norw Foxwoods New Stable Falmouth	Dennis Chatham Dennis Port
New Haven 9 NEW CONDON New Haven 9 NEW CONDON 9 NEW CONDON New England 9 New England 9 Ne	t Sound Nantucket Island Nantucket

Source: Rhode Christiansen Capital Advisors

Exhibit A.11: Scenario # 4 Revenue Projections w/o Table Games at Twin River

GGR (in millions)	2012	201	3 20	014	2015	2016	2017	CAGR
Twin River	\$ 470.0	\$ 487.9	9 \$ 507	7.6 \$	436.1	\$ 360.8	\$ 331.5	-5.9%
Newport Grand	\$ 47.5	\$ 48.	7 \$ 49	9.9 \$	44.6	\$ 32.8	\$ 29.5	-7.6%
Rhode Island Gaming Revenue	\$ 517.5	\$ 536.0	6 \$ 557	7.5 \$	480.7	\$ 393.6	\$ 360.9	-6.1%
State Revenue (in millions)	2012	201	3 20)14	2015	2016	2017	CAGR
Twin River	\$ 285.2	\$ 301.	5 \$ 313	8.7 \$	269.5	\$ 223.0	\$ 204.8	-5.6%
Newport Grand	\$ 29.5	\$ 29.8	3 \$ 30).5 \$	27.3	\$ 20.1	\$ 18.0	-7.8%

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

Exhibit A.12 summarizes and expresses in graphic format the results presented in Exhibit A.11.



Exhibit A.12: Scenario #4 Revenue Projections w/o Table Games at Twin River

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #5, IMPACT WITHOUT TABLE GAMES AT TWIN RIVER: MASSACHUSETTS COMPETITION: MILFORD, NEW BEDFORD, TAUNTON/RAYNHAM PLUS WESTERN MASSACHUSETTS

Exhibit A.14 presents our estimates of the impacts of gaming in Massachusetts on Rhode Island VLT revenue under the following scenario: Massachusetts casinos located in Milford, New Bedford, and Western Massachusetts and a racino at Raynham Park in Raynham. We project gaming revenue will decline from a peak of \$557.5 million in FY 2014 to \$351.3 million by FY 2017, a decline of 36.4 percent. The State's share of this revenue will decline from a peak of \$344.2 million in FY 2014 to \$218.8 million in FY 2017.

Exhibit A.13: Scenario # 5 Map



Source: Rhode Christiansen Capital Advisors

Exhibit A.14: Scenario # 5 Revenue Projections w/o Table Games at Twin River

GGR (in millions)		2012	2013	3	2014		2015		2016		2017	CAGR
Twin River	\$	470.0	\$ 487.9	\$ 5	507.6	\$	472.9	\$	359.4	\$	329.7	-6.0%
Newport Grand	\$	47.5	\$ 48.7	\$	49.9	\$	45.8	\$	28.8	\$	24.6	-9.6%
Rhode Island Gaming Revenue	\$	517.5	\$ 536.6	\$ 5	557.5	\$	518.7	\$	388.2	\$	354.3	-6.3%
State Revenue (in millions)		2012	201	3	2014		2015		2016		2017	CAGR
Twin River	\$	285.2	\$ 301.5	\$ 3	313.7	\$	292.2	\$	222.1	\$	203.8	-5.7%
Newport Grand	\$	29.5	\$ 29.8	\$	30.5	\$	28.0	\$	17.6	\$	15.1	-9.8%
Rhode Island Gov't Revenue	Ś	314.7	\$ 331.3	\$ 3	344.2	Ś	320.3	Ś	239.7	Ś	218.8	-6.1%

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

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Exhibit A.15 summarizes and expresses in graphic format the results presented in Exhibit A.14.



Exhibit A.15: Scenario #5 Revenue Projections w/o Table Games at Twin River

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #6, IMPACT WITHOUT TABLE GAMES AT TWIN RIVER: MASSACHUSETTS COMPETITION: MILFORD, MIDDLEBORO, TAUNTON/RAYNHAM PLUS WESTERN MASSACHUSETTS

Exhibit A.17 presents our estimates of the impacts of gaming in Massachusetts on Rhode Island VLT revenue under the following scenario: Massachusetts casinos located in Milford, Middleboro and Western Massachusetts and a racino at Raynham Park in Raynham. We project gaming revenue will decline from a peak of \$557.5 million in FY 2014 to \$360.0 million by FY 2017, a decline of 35.4 percent. The State's share of this revenue will decline from a peak of \$344.2 million in FY 2014 to \$222.3 million in FY 2017.

Exhibit A.16: Scenario # 6 Map



Source: Rhode Christiansen Capital Advisors

GGR (in millions) 2012 2013 2014 2015 2017 CAGR Twin River \$ 470.0 \$ 487.9 \$ 507.6 \$ 472.9 \$ 360.7 \$ 331.4 -5.9% \$ \$ \$ Newport Grand 47.5 \$ 48.7 49.9 \$ 45.8 32.1 \$ 28.6 -7.9% Rhode Island Gaming Revenue -6.1% \$ 517.5 \$ 536.6 \$ 557.5 \$ 518.7 \$ 392.9 \$ 360.0 State Revenue (in millions) 2012 2013 2014 2015 2016 2017 CAGR Twin River \$ 285.2 \$ 301.5 \$ 313.7 \$ 292.2 \$ 222.9 \$ 204.8 -5.6% \$ \$ Newport Grand 29.5 \$ 29.8 \$ 30.5 \$ 28.0 19.7 \$ 17.5 -8.1% Rhode Island Gov't Revenue \$ 314.7 \$ 331.3 \$ 344.2 \$ 320.3 \$ 242.6 \$ 222.3 -5.9% Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

Exhibit A.17: Scenario # 6 Revenue Projections w/o Table Games at Twin River

Exhibit A.18 summarizes and expresses in graphic format the results presented in Exhibit A.17.



Exhibit A.18: Scenario #6 Revenue Projections w/o Table Games at Twin River

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #1, IMPACT WITH TABLE GAMES AT TWIN RIVER: PLAINRIDGE, WESTERN MASSACHUSETTS, SUFFOLK DOWNS AND NEW BEDFORD

In the following sections, we have adjusted our models to include table games as well as machines at Twin River under the same six scenarios for gaming in Massachusetts as in the preceding sections.

Exhibit A.19 presents projections for Rhode Island gaming revenue under the following competitive Massachusetts scenario: casinos at Suffolk Downs in East Boston, in New Bedford and in Western Massachusetts and a racino at Plainridge Racecourse in Plainville. Under this scenario, gaming revenue declines from a peak of \$625.1 million in FY 2014 to \$415.5 million by FY 2017, or by 33.5 percent. The State of Rhode Island's share declines from a peak of \$364.6 million in FY 2014 to \$239.0 million in FY 2017. For FY 2017, this is a \$17.7 million, or 8.0 percent, improvement over the same scenario without table games at Twin River (Exhibits A19, A2).

Exhibit A.19: Scenario # 1 Rev	venı	ue Proj	ect	ions w	ith	Table	Gai	mes at	T٧	vin Rive	er		
GGR (in millions)		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	Ś	470.0	Ś	487.9	Ś	495.2	ć	425.5	Ś	354.6	Ś	326.4	-6.1%
Twin River Tables	Ş	470.0	Ş	407.9	ş Ś	495.Z 80.0	ې S	425.5 85.0	ې Ś	354.0 82.1	ې Ś	526.4 65.7	-0.1%
Newport Grand	\$	47.5	\$	48.7	\$	49.9	\$	44.6	\$		\$	23.4	-10.2%
Rhode Island Gaming Revenue	\$	517.5	\$	536.6	\$	625.1	\$	555.1	\$	464.5	\$	415.5	-3.9%
State Revenue (in millions)		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	\$	285.2	\$	301.5	\$	306.0	\$	262.9	\$	219.1	\$	201.7	-5.9%
Twin River Tables					\$	28.0	\$	29.8	\$	28.7	\$	23.0	
Newport Grand VLTs	\$	29.5	\$	29.8	\$	30.5	\$	27.3	\$	17.0	\$	14.3	-10.3%
Rhode Island Gov't Revenue	\$	314.7	\$	331.3	\$	364.6	\$	320.0	\$	264.9	\$	239.0	-4.8%
Source: Rhode Island Department of Reve	enue	Christians	sen (Capital Ac	lvisc	ors. LLC e	stim	ates.					

Exhibit A.20 summarizes and expresses in graphic format the results presented in Exhibit A.19.





Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #2, IMPACT WITH TABLE GAMES AT TWIN RIVER: SUFFOLK DOWNS, MIDDLEBORO, TAUNTON/RAYNHAM PLUS WESTERN MASSACHUSETTS

Exhibit A.21 presents projections for Rhode Island gaming revenue under the following competitive Massachusetts scenario: casinos at Suffolk Downs in East Boston, in Middleboro, and in Western Massachusetts and a racino at Raynham Park in Raynham. Under this scenario, gaming revenue declines from a peak of \$625.1 million in FY 2014 to \$462.1 million by FY 2017, or by 26.1 percent. The State of Rhode Island's share declines from a peak of \$364.6 million in FY 2014 to \$269.1 million in FY 2017. For FY 2017, this is a \$18.2 million, or 7.3 percent, improvement over the same scenario without table games at Twin River (Exhibits A21, A5).

GGR (in millions)		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	\$	470.0	\$	487.9	\$	495.2	\$	461.3	\$	396.1	\$	376.3	-4.0%
Twin River Tables					\$	80.0	\$	85.0	\$	78.5	\$	61.0	
Newport Grand VLTs	\$	47.5	\$	48.7	\$	49.9	\$	45.8	\$	29.0	\$	24.8	-9.6%
Rhode Island Gaming Revenue	\$	517.5	\$	536.6	\$	625.1	\$	592.1	\$	503.6	\$	462.1	-2.1%
State Revenue (in millions)		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	\$	285.2	\$	301.5	\$	306.0	\$	285.1	\$	244.8	\$	232.6	-3.7%
	\$	285.2	\$	301.5	\$ \$	306.0 28.0	\$ \$	285.1 29.8	\$ \$	244.8 27.5	\$ \$	232.6 21.4	-3.7%
Twin River VLTs Twin River Tables Newport Grand VLTs	\$ \$	285.2 29.5	•	301.5 29.8	- 1 I		. <u>.</u>				\$		-3.7% -9.7%

Exhibit A.21: Scenario # 2 Revenue Projections with Table Games at Twin River

Exhibit A.22 summarizes and expresses in graphic format the results presented in Exhibit A.21.





Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #3, IMPACT WITH TABLE GAMES AT TWIN RIVER: MILFORD, NEW BEDFORD, PLAINRIDGE PLUS WESTERN MASSACHUSETTS

Exhibit A.23 presents projections for Rhode Island gaming revenue under the following competitive Massachusetts scenario: casinos in Milford, New Bedford, and Western Massachusetts and a racino at Plainridge Racecourse in Plainville. Under this scenario, gaming revenue declines from a peak of \$625.1 million in FY 2014 to \$396.3 million by FY 2017, or by 36.3 percent. The State of Rhode Island's share declines from a peak of \$364.6 million in FY 2014 to \$230.9 million in FY 2017. For FY 2017, this is a \$12.9 million, or 5.9 percent, improvement over the same scenario without table games at Twin River (Exhibits A23, A8).

GGR (in millions)		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	Ś	470.0	Ś	487.9	Ś	495.2	Ś	425.5	Ś	350,4	Ś	321.4	-6.3%
Twin River Tables	Ŷ	17010	Ŷ	10715	\$	80.0	ś	85.0	ś	71.2	.	51.7	0.07
Newport Grand VLTs	\$	47.5	\$	48.7	\$	49.9	\$	44.6	\$	27.7		23.3	-10.2%
Rhode Island Gaming Revenue	\$	517.5	\$	536.6	\$	625.1	\$	555.1	\$	449.3	\$	396.3	-4.7%
State Revenue (in millions)		2012		2013		2014		2015		2016		2017	CAGR
		2022						2020		2020			
Twin River VLTs	\$	285.2	\$	301.5	\$	306.0	\$	262.9	\$	216.5	\$	198.6	-6.19
Twin River Tables					\$	28.0	\$	29.8	\$	24.9	\$	18.1	
Newport Grand VLTs	\$	29.5	\$	29.8	\$	30.5	\$	27.3	\$	17.0	\$	14.2	-10.39
Rhode Island Gov't Revenue	Ś	314.7	Ś	331.3	Ś	364.6	Ś	320.0	Ś	258.4	Ś	230.9	-5.39

Exhibit A.24 summarizes and expresses in graphic format the results presented in Exhibit A.23.





Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #4, IMPACT WITH TABLE GAMES AT TWIN RIVER: MILFORD, MIDDLEBORO, PLAINRIDGE PLUS WESTERN MASSACHUSETTS

Exhibit A.25 presents projections for Rhode Island gaming revenue under the following competitive Massachusetts scenario: casinos in Milford, Middleboro, and Western Massachusetts and a racino at Plainridge Racecourse in Plainville. Under this scenario, gaming revenue declines from a peak of \$625.1 million in FY 2014 to \$401.5 million by FY 2017, or by 36.6 percent. The State of Rhode Island's share declines from a peak of \$364.6 million in FY 2014 to \$234.8 million in FY 2017. For FY 2017, this is a \$11.9 million, or 5.3 percent, improvement over the same scenario without table games at Twin River (Exhibits A25, A11).

CCD (in millions)		2012		2012		2014		2015		2016		2017	CACD
GGR (in millions)		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	\$	470.0	\$	487.9	\$	495.2	\$	425.5	\$	352.0	\$	323.4	-6.2%
Twin River Tables					\$	80.0	\$	85.0	\$	69.2	\$	49.1	
Newport Grand VLTs	\$	47.5	\$	48.7	\$	49.9	\$	44.6	\$	32.5	\$	29.0	-7.8%
Rhode Island Gaming Revenue	\$	517.5	\$	536.6	\$	625.1	\$	555.1	\$	453.7	\$	401.5	-4.5%
State Revenue (in millions)		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	\$	285.2	\$	301.5	\$	306.0	\$	262.9	\$	217.5	Ş	199.8	-6.09
	\$	285.2	\$	301.5	\$ \$	306.0 28.0	\$ \$	262.9 29.8	\$ \$	217.5 24.2	\$ \$	199.8 17.2	-6.09
Twin River VLTs Twin River Tables Newport Grand VLTs	\$ \$	285.2 29.5	\$ \$	301.5 29.8	.		.		.				-6.0% -8.0%

Exhibit A.26 summarizes and expresses in graphic format the results presented in Exhibit A.25.





Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #5, IMPACT WITH TABLE GAMES AT TWIN RIVER: MILFORD, NEW BEDFORD, TAUNTON/RAYNHAM PLUS WESTERN MASSACHUSETTS

Exhibit A.24 presents projections for Rhode Island gaming revenue under the following competitive Massachusetts scenario: casinos in Milford, New Bedford and Western Massachusetts and a racino at Raynham Park in Raynham. Under this scenario, gaming revenue declines from a peak of \$625.1 million in FY 2014 to \$397.6 million by FY 2017, or by 36.4 percent. The State of Rhode Island's share declines from a peak of \$364.6 million in FY 2014 to \$231.7 million in FY 2017. For FY 2017, this is a \$12.9 million, or 5.9 percent, improvement over the same scenario without table games at Twin River (Exhibits A.27, A14).

Exhibit A.27: Scenario # 5 R	eveni	ie Proj	561		1111	Table	Gal	nes at	IW		71		
GGR (in millions)		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	\$	470.0	\$	487.9	\$	495.2	\$	461.3	\$	350.6	\$	321.7	-6.3%
Twin River Tables	•		•		\$	80.0	\$	85.0	\$	71.2	\$	51.7	
Newport Grand VLTs	\$	47.5	\$	48.7	\$	49.9	\$	45.8	\$	28.5	\$	24.3	-9.8%
Rhode Island Gaming Revenue	\$	517.5	\$	536.6	\$	625.1	\$	592.1	\$	450.3	\$	397.6	-4.6%
State Revenue (in millions)		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	\$	285.2	\$	301.5	\$	306.0	\$	285.1	\$	216.7	\$	198.8	-6.1%
Twin River Tables					\$	28.0	\$	29.8	\$	24.9	\$	18.1	
Newport Grand VLTs	\$	29.5	\$	29.8	\$	30.5	\$	28.0	\$	17.5	\$	14.8	-9.9%
	\$	314.7	\$	331.3	\$	364.6	\$	342.9	\$	259.0	\$	231.7	-5.3%
Rhode Island Gov't Revenue													

Exhibit A.28 summarizes and expresses in graphic format the results presented in Exhibit A.27.



Exhibit A.28 Scenario #5 Revenue Projections with Table Games at Twin River

Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.

ALTERNATIVE SCENARIO #6, IMPACT WITH TABLE GAMES AT TWIN RIVER: MILFORD, MIDDLEBORO, TAUNTON/RAYNHAM PLUS WESTERN MASSACHUSETTS

Exhibit A.29 presents projections for Rhode Island gaming revenue under the following competitive Massachusetts scenario: casinos in Milford, Middleboro, and Western Massachusetts and a racino at Raynham Park in Raynham. Under this scenario, gaming revenue declines from a peak of \$625.1 million in FY 2014 to \$400.6 million by FY 2017, or by 35.9 percent. The State of Rhode Island's share declines from a peak of \$364.6 million in FY 2014 to \$234.2 million in FY 2017. For FY 2017, this is a \$11.9 million, or 5.4 percent, improvement over the same scenario without table games at Twin River (Exhibits A.23, A.11).

				ions w									
GGR (in millions)		2012		2013		2014		2015		2016		2017	CAGR
Twin River VLTs	Ś	470.0	\$	487.9	\$	495.2	\$	461.3	\$	351.9	\$	323.3	-6.2%
Twin River Tables			•		\$	80.0	\$	85.0	\$	69.2	\$	49.1	
Newport Grand VLTs	\$	47.5	\$	48.7	\$	49.9	\$	45.8	\$	31.8	\$	28.2	-8.1%
Rhode Island Gaming Revenue	\$	517.5	\$	536.6	\$	625.1	\$	592.1	\$	453.0	\$	400.6	-4.5%
State Revenue (in millions)		2012		2013		2014		2015		2016		2017	CAGR
state Nevenue (in minions)		2012		2013		2014		2015		2010		2017	CAON
	Ś	285.2	\$	301.5	Ś	306.0	Ś	285.1	\$	217.5	\$	199.8	-6.0%
Twin River VLTs													
Twin River VLIS					\$	28.0	\$	29.8	\$	24.2	\$	17.2	
	\$	29.5	\$	29.8	; \$		\$ \$	29.8 28.0	\$ \$	24.2 19.5	\$ \$	17.2 17.3	-8.3%

Exhibit A.30 summarizes and expresses in graphic format the results presented in Exhibit A.29.





Source: Rhode Island Department of Revenue, Christiansen Capital Advisors, LLC estimates.