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# **Massachusetts Statewide Gaming Report**

Prepared for:

**The Massachusetts Senate  
Commonwealth of Massachusetts**

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Prepared by:



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# Massachusetts Statewide Gaming Report

## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
EBITDA ESTIMATES & IMPACTS ON CAPITAL DECISIONS .....	2
CONCLUSIONS AND APPLICATION OF FINDINGS TO THE CASE OF MASSACHUSETTS .....	3
<i>Maximize the Potential to Create an Attractive, Regional and Nationally Competitive Industry.....</i>	4
<i>Maximize Stability in Tax and Regulatory Environment.....</i>	8
<i>Maintain a Healthy Gaming Industry .....</i>	9
<b>INTRODUCTION .....</b>	<b>11</b>
<b>TAX AND REGULATORY REVIEW .....</b>	<b>15</b>
INTRODUCTION .....	15
BENEFITS OF A HEALTHY GAMING INDUSTRY .....	16
<i>Approach to Our Analysis.....</i>	17
<i>Tax Structures and Effective Tax Rates .....</i>	19
<i>Full-Service Casino Jurisdictions.....</i>	19
<i>Racetrack Casino Jurisdictions .....</i>	23
<i>Graduated Vs. Static Tax Rates .....</i>	33
<i>License Fees and Other Up-Front Requirements .....</i>	33
<i>Origins and Motivations .....</i>	33
<i>License Fee as a Tax.....</i>	34
<i>How License Fees Limit Capital Investment and Competitiveness .....</i>	35
<i>Case Studies – Well Received .....</i>	37
<i>Case Studies – Questionable Results .....</i>	39
REVIEWING THE MARKET OUTCOMES OF POLICY CHOICES: A CASE STUDY APPROACH .....	43
<i>Effects of an Excessive and/or Unstable Tax Rate.....</i>	43
<i>Decline in Gaming Revenue.....</i>	45
<i>Successful Gaming Environments.....</i>	55
IDENTIFYING POLICY DETERMINANTS OF GAMING INDUSTRY HEALTH & DEVELOPMENT.....	57
<i>Generating the Benefits of a Healthy Gaming Industry .....</i>	57
DETERMINANTS OF THE CAPITAL INVESTMENT DECISION.....	59
<i>Requiring a Minimum Level of Capital Investment .....</i>	59
<i>Capital Investment Levels and the Capital Markets .....</i>	61
<i>Gaming Tax Burden.....</i>	61
<i>Considering Requirements on Capital Investment or Development Scale and Scope .....</i>	62
<i>Stability of Tax Rate Structure .....</i>	63
<i>Leverage and Financing .....</i>	63
<i>Regulatory Environment .....</i>	65
THE SELECTION PROCESS.....	65
<i>Request for Qualifications .....</i>	65
<i>Request for Proposals.....</i>	66
<i>On-Going Capital Expenditures .....</i>	67
SUMMARY OF GENERAL POLICY IMPLICATIONS .....	68
<b>GAMING REVENUE ESTIMATES .....</b>	<b>70</b>
REGIONAL ECONOMIC OVERVIEW .....	70
<i>Claritas Methodology .....</i>	70
<i>Regional Demographic Data.....</i>	71

<i>Existing and Proposed Competition</i> .....	73
<i>Indicators of Gaming Behavior in New England</i> .....	79
FORECASTED GROSS GAMING REVENUE.....	85
<i>Major Assumptions</i> .....	85
LOCAL MARKET METHODOLOGY.....	87
<i>Market Carve-out</i> .....	90
<i>Calibration</i> .....	95
LOCAL MARKET REVENUE ANALYSIS.....	96
<i>Baseline Case</i> .....	97
<i>Local Market Forecasts for Scenarios 1 and 2</i> .....	98
<i>Local Market for Scenario 3</i> .....	100
<i>Local Market for Scenario 4</i> .....	104
TOURISM.....	107
<i>Methodology</i> .....	107
<i>Offsite Tourism</i> .....	107
<i>Onsite Tourism</i> .....	111
<i>Total Gross Gaming Revenue Comparisons: First Full Year of Operations</i> .....	113
RAMP-UP PERIOD.....	121
<i>Gaming Revenue</i> .....	121
<i>Scenario 2</i> .....	122
<i>Scenario 3A</i> .....	123
<i>Scenario 3B</i> .....	123
<i>Scenario 3C</i> .....	124
<i>Scenario 4B</i> .....	125
EBITDA ESTIMATES.....	125
<i>Scenario 2</i> .....	126
<i>Scenario 3A</i> .....	127
<i>Scenario 4A</i> .....	128
<i>Scenario 4B</i> .....	128
SUPPLEMENTAL SCENARIO.....	129
<i>Revenue Estimate</i> .....	129
<b>ECONOMIC IMPACT/BENEFITS TO MASSACHUSETTS.....</b>	<b>131</b>
JOB CREATION.....	131
INDIRECT JOB CREATION.....	134
GAMING TAXES.....	135
<i>Alternative Gaming Tax</i> .....	139
SMOKING IMPACT.....	140
<i>Case Studies: Casinos and Smoking Ban Impacts</i> .....	140
<i>Impact Analysis</i> .....	149
<i>Smoking Prevalence and Impact Summary</i> .....	149
<b>POTENTIAL IMPACT OF CASINO GAMING ON THE MASSACHUSETTS LOTTERY .....</b>	<b>152</b>
INTRODUCTION AND APPROACH.....	152
OVERVIEW OF MASSACHUSETTS LOTTERY .....	153
<i>Historical Revenue</i> .....	153
<i>Distribution</i> .....	154
<i>Historical growth</i> .....	155
<i>Unique Aspects of the Massachusetts Lottery</i> .....	155
THE IMPACT OF CASINO GAMING ON LOTTERY PERFORMANCE .....	156
<i>Historical Impacts by State with Casinos</i> .....	156
<i>Revenue Growth for States without Casinos</i> .....	166
<i>Interpretation of Historical Trends</i> .....	169
FORECASTING THE IMPACT OF CASINOS ON THE MASSACHUSETTS LOTTERY .....	169
<i>Possible Approaches to Forecasting Impacts</i> .....	170
<i>Impact Projections for Massachusetts</i> .....	171

CONCLUSIONS .....176

**CONCLUSIONS AND APPLICATION OF FINDINGS TO THE CASE OF MASSACHUSETTS 178**

MAXIMIZE THE POTENTIAL TO CREATE AN ATTRACTIVE, REGIONAL AND NATIONALLY COMPETITIVE  
INDUSTRY .....179

MAXIMIZE STABILITY IN TAX AND REGULATORY ENVIRONMENT .....182

MAINTAIN A HEALTHY GAMING INDUSTRY .....183

**DISCLAIMER.....184**

# EXECUTIVE SUMMARY

The Innovation Group was engaged by the Massachusetts Senate, through State Senator Stanley Rosenberg’s office, to provide advisory services in connection with the potential introduction of legislation enabling casino gaming in the Commonwealth of Massachusetts.

The Innovation Group’s scope of work for which we were engaged included the preparation of a tax and regulatory discussion including details on existing gaming jurisdictions and statewide gaming revenue estimates that evaluated the potential gaming revenues that could be generated under a number of alternative development scenarios. An analysis of gaming revenue dollars currently leaving the Commonwealth of Massachusetts to the state’s main competitive set, as identified by The Innovation Group, and the potential for the proposed Massachusetts recapture of these revenues was also undertaken as part of the gaming revenue analysis.

In addition to completing the gaming revenue estimates, the Senate requested that The Innovation Group complete a limited Economic Impact Analysis, specifically focusing on direct and indirect job creation as well as the fiscal impacts of any proposed licensing fees and gaming taxes. Finally, we were requested to provide an evaluation of the potential impact that the introduction of casino gaming might have on the successful Massachusetts Lottery.

Our analysis began with the evaluation of the casino revenue potential for the Commonwealth of Massachusetts under several predetermined scenarios.

## Scenario Summary<sup>1</sup>

Scenario	Description
1	2 Casino Resort Licenses
2	One Destination Resort in each of the 3 Regions <sup>2</sup>
3	One Destination Resort in each of the 3 Regions <sup>2</sup> and one Native American facility in Region 2
4A	One Destination Resort in each of the 3 Regions <sup>2</sup> and 750 slots at each track <sup>3</sup>
4B	One Destination Resort in each of the 3 Regions <sup>2</sup> and 1,500 slots at each track <sup>3</sup>
5	One Destination Resort in each of the 3 Regions <sup>2</sup> , assuming a Native American facility in Region 2, and 750 slot machines in Raynham <sup>3</sup> and Plainridge <sup>3</sup>

Source: The Innovation Group

1) Tax rate assumed to be from House bill

2) 3 Regions: 1: Suffolk, Middlesex, Essex, Worcester County and parts of Norfolk  
2: Bristol, Plymouth, Nantucket, Dukes, Barnstable and parts of Norfolk,  
3: Hampshire, Hampden, Franklin, and Berkshire

3) Plainridge and Suffolk Downs are existing, operational Horse Racing Tracks that are in contention for slots. Raynham and Wonderland are former dog racing facilities that are non-operational but are in contention for slot machines.

The generation of revenue estimates for Massachusetts included several assumptions that were integral to the modeling process. Those include:

- The current economic recovery continues at a modest pace; and
- Aqueduct Casino opens in New York offering 4,500 VLT machines; and
- A casino in Oxford, Maine opens offering 750 slot machines; and
- Legislation is passed in Rhode Island that allows for table games to be offered at the existing VLT facilities in Rhode Island, and Twin River expands to facilitate the additional offering; and
- Smoking is permitted on 25% of the floor space on the casino floors in each of the Massachusetts facilities, which will include a cross-section of all games permitted each respective facility (see the Smoking Impact section of this report for information regarding the impact a smoking ban could have on the estimates contained herein); and
- All commercial facilities open on January 1, 2014 with the first stabilized year of operations being calendar year 2016; and
- All facilities are marketed and operated by experienced, professional management teams; and
- A high level of customer service and security is customary at all facilities.

Taxes in the gaming industry are typically levied against revenue, and are, on the whole, substantially higher than in other industries. Since the industry is capital intensive, tax structures can have a dramatic effect on capital investments and ongoing operations. Solely for comparison purposes, the revenue estimates in this document assumed the tax structure is consistent with House Bill 4591. Like other industries, taxes generally stifle investment in the casino gaming industry. Since those taxes are levied against revenue the effects of changes in the tax rate have a substantial effect on the competitiveness of the gaming product and performance, and a full discussion is included in this analysis.

Another fundamental underlying premise to our analysis was the consideration of the strategic goals and objectives driving the proposed introduction of casino gaming within Massachusetts.

The Innovation Group understands that the primary goal of introducing casino gaming to Massachusetts is to enhance economic development, including revenue to the state, and create jobs. We also understand that this objective is not just short-term in nature. The Commonwealth appears focused on ensuring that the gaming industry in Massachusetts is sustainable and competitive for many years to come.

Consequently our review and recommendations with regard to policy issues such as the tax rate on gaming revenues and up-front licensing fees centered around these objectives.

### ***EBITDA Estimates & Impacts on Capital Decisions***

A key component to our evaluation of potential tax structures as well as other considerations including facility scope and development costs was an analysis of the

potential range of Earnings Before Interest, Taxes and Depreciation and Amortization (“EBITDA”) that facilities could achieve under various scenarios. EBITDA is a metric of profitability that is commonly utilized in the gaming industry for evaluating the potential viability of a project and the amount of leverage that can be applied to a project. Our study included a discussion regarding the current capital markets, leverage ratios in the casino industry, and how these items combined with forecasted EBITDA levels directly impact the ultimate size, scope, and competitiveness of a project. Higher levels of revenues and EBITDA can be achieved through the development of large Destination Resorts that have the scope, size, and amenities that allow them to compete with the existing completion in the region.

This focus on EBITDA was also particularly relevant when comparing different scenarios. For example, the scenarios with the potential highest statewide gaming revenue estimates are not necessarily the ones that allow the Commonwealth to meet its stated overall long-term goals and objectives. This situation occurs because as additional gaming capacity is added, it dilutes the revenue and EBITDA of other properties, creating situations where the properties forecasts can no longer support the amount of capital needed to build the facility and provide adequate returns for investors. Of particular importance is stakeholders and operators’ perceived risk associated with investments as further supply and locations are permitted under the legislation. Specific nuances in Massachusetts that lead to increased risk for Destination Resorts include the potential for the federal government to put land in trust for Native American operations within the Commonwealth’s boundaries, creating a competitive environment that is not equitable for all operators, and the potential for a limited number of slot machines at existing and former racing facilities.

In terms of economic impact and job creation, The Innovation Group estimated the number of direct and indirect jobs that could be created on an on-going basis as a result of the introduction of casino gaming to Massachusetts under a number of different scenarios. The scenarios where large Destination Resorts are built led to the highest level of job creation and include a variety of career opportunities. In addition, while we were not commissioned to estimate the number of jobs created during the construction and development cycle, such jobs and economic benefits are usually significant and should be considered as part of the overall potential benefits of the industry. Larger resorts include more amenities and therefore the more complex the development, the greater the construction budget, hence more construction jobs are created compared to smaller facilities, or slots only facilities with limited amenities

## *Conclusions and Application of Findings to the Case of Massachusetts*

The primary objective of the proposed introduction of casino gaming in Massachusetts is to enhance economic development and create jobs. The Commonwealth however, is not just focused on the short-term but wants to ensure that policies are in place and decisions are made that will allow the industry to thrive and be competitive and sustainable for many years to come.

It must be recognized that future casino developers and operators in Massachusetts, despite the perception that they will enjoy an Oligopoly given the likely limit in the number of licenses, will face significant competitive pressures. Gaming is well established in Connecticut and Rhode Island, as well as in Atlantic City, New York and Pennsylvania which all constrain the potential feeder markets in the northeast. In addition, these markets have had the advantage of cultivating gamer loyalty over the past several decades. Based upon the assumed competitive landscaped, further competition is likely to come from enhanced offerings in Rhode Island (table games) as well as additional gaming locations in Maine and perhaps New Hampshire. Thus, it is imperative that Massachusetts focus on establishing policies which maximize the potential competitiveness of the gaming industry.

In order to maximize the economic impact in Massachusetts, the Commonwealth needs to ensure that the industry is viable and sustainable for the long term and provide an overall experience that is competitive. Also, a system must be in place to ensure capital investment in attractive and competitive facilities. To accomplish this proposed new projects and expansion projects must achieve a certain level of profitability.

This report highlights how a healthy gaming industry will in fact lead to a number of simultaneous benefits. The fiscal benefits include tax revenue for the governmental entities and programs, and economic expansion. Economic expansion leads to more jobs and increased spending on goods and services in the state. Economic expansion is a direct result of the capital investment associated with the gaming facilities. In setting gaming industry policy, gaming regulators should be mindful of the trade-offs between long-term benefits associated with a healthy industry and the temporary impacts of increased gaming taxes generated by a higher effective tax rate.

In light of this situation, maximizing capital investment and thus the quality of the gaming product is especially important for Massachusetts, given the Commonwealth's goal of developing a sustainable and competitive industry. The Commonwealth will benefit from attracting well-capitalized companies with strong operating and development track records. In order to attract such entities, establishing the right policies will be critical. Policies which are most likely to drive the intended results are as follows:

### **Maximize the Potential to Create an Attractive, Regional and Nationally Competitive Industry**

- The jurisdictions with the lowest effective tax rates often feature the most elaborate casino developments, such as in Las Vegas, Atlantic City, Mississippi, and the Bahamas. The profit margins enabled by lower tax structures allow for the attraction of significant initial capital investment and subsequent reinvestment. In our modeling process we have utilized a flat 27% tax rate on gaming revenues for the Destination Resorts. This rate and structure represents the tax rate and structure included in the latest House bill and was utilized as an assumption in order to create a baseline case. However, it should be noted that on top of the 27% gaming tax in that specific proposal are other fees and costs which ultimately

leads to what becomes an “effective tax rate” of 32%. In other words, additional levies of 2.5% of gaming revenues to fund programs for social costs associated with gaming and an additional 2.5% of gaming revenues to fund community mitigation costs must be paid by operators and therefore to them and the financing community are additional “taxes”. We believe that this tax structure of 27%, along with the additional 5% of other levies, approximates the upper limit of what the effective tax rate can be in Massachusetts and still meet the goals and objectives of the Commonwealth. In fact, in order to induce the maximum level of investment possible given market potential and the current state of the capital markets, we would suggest that consideration be given to lowering the gaming tax structure on the Destination Resorts to 25%, from 27%, especially in consideration of the Up-Front fee discussion noted below. This reduction would bring the effective tax rate to 30%, (25% gaming tax plus the 5% of other levies). The rationale behind the suggested reduction is that the Up-Front license fees, as noted in this report, are in effect an additional form of taxation. Hence, the upfront fees have the effect of raising the effective tax rate by an additional 2%-3%, thereby bringing the overall effective tax rate back up to the maximum 32%-33%% range, at least during the period that the fees were being amortized over. A graduated tax structure was considered from the perspective of viewing the Western Massachusetts market relative to the other two regions. While a facility in that market has been forecasted to have lower gaming revenues of approximately 25%-30% compared to the other two regions, the revenue potential is still significant, the competitive marketplace is attractive, and the overall discrepancy in revenue potential is not significant enough to warrant a graduated tax structure.

- The Up-Front license fees should be set at \$75 million for the two regions closest to Boston and \$50 million for Western Massachusetts. The chart below summarizes the impact that various levels of license fees would have on the effective tax rates given various levels of revenues. In essence, for a facility deriving \$500 million in revenues, a \$75 million fee raises the effective tax rate by approximately 2.9%, and for a facility in Western Massachusetts achieving \$400 million in revenues, a fee of \$50 million would have approximately the same effect and would be more appropriate.

**Impact on Effective Tax Rate of License Fees<sup>1</sup>**

Revenue (\$M)	License Fees (\$M)			
	\$25.0	\$35.0	\$50.0	\$75.0
\$350.0	1.4%	1.9%	2.8%	4.2%
\$400.0	1.2%	1.7%	2.4%	3.6%
\$450.0	1.1%	1.5%	2.2%	3.2%
\$500.0	1.0%	1.4%	1.9%	2.9%

Source: The Innovation Group

1) Assumes 8-year term at 11.0%

- Limit the number of major casinos to one “Destination Resort” per region in order to reduce competitive risk, encourage investment and ultimately allow the developers to the ability obtain the amount of financing needed under rates and terms and conditions that permit them to build competitive facilities and have the operating flexibility needed to remain competitive. The addition of a potential fourth Destination Resort in the form of a Native American facility at some point in time has a potential significant negative effect (up to %75 million or 15%) on the forecasted revenues of the three Destination Resort facilities. This reduction in revenue will affect both EBITDA and the level of investment in Destination Resorts. First, the revenue loss will have a disproportionately high impact on EBITDA as these higher level of total revenues represent higher marginal profits for the properties. In other words, the properties have covered fixed and semi-variable costs with the majority of the revenue estimates. The remaining incremental revenues, or in this case those revenues expected to be lost to the new property, generally only have variable costs associated with them and therefore account for a significant component of the overall profitability.. Thus, the EBITDA loss on \$75 million in revenue could equate to as much as \$40-45 million in reduced EBITDA. Consequently, investors will be likely have to reduce the overall level of investment in a Destination Resort, in our estimation by as much as nearly \$200 million (assuming leverage at 4.0x EBITDA), meaningfully decreasing the scale and attractiveness of the resort. In addition, the overall uncertainty created by the potential entrance of a Native American facility at some point in time, would likely contribute to the market risks for developers and further impair the ability of developers to attract the capital needed to build large competitive facilities.
- The introduction of a limited number of slots at existing and former race facilities (750 at each of four locations) could ultimately grow the overall market revenues and increase the number of jobs created. While under the 750 machine scenario, the impact on the Destination Resort revenue estimates are not as severe as in Scenario 4B (1,500 machines per location), the presence of slots at existing and former race facilities alone would likely create material uncertainty and additional risk to potential developers seeking capital. This in turn would impact the overall scope and size of potential development projects. Developers are likely to be hesitant to commit capital to the level they would without the presence of slots at existing and former race facilities or may prefer to move forward on a phasing approach to developments. Further concerns about the tracks adding more slots in the future, which would create further dilution, (and as demonstrated in Scenario 4B) could provide enough market uncertainty that the long term goals of the Commonwealth for the industry in Massachusetts are impacted. It is likely that, under this set of competitive circumstances, an investment that does not reflect the full market potential in the region will lead to a product statewide that will not effectively compete against facilities in nearby states, specifically the resorts located in Connecticut. If the Commonwealth were to move forward under a scenario whereby tracks receive a limited number of licenses, despite the risks noted above, consideration should be given to providing developers of the

proposed Destination Resorts (and consequently their financing sources), with the commitment that that the number of slot at the racetracks would not be increased meaningfully during the initial license period for the Destination Resorts.

- The significant potential negative implications of implementing a scenario whereby the existing and former racetracks are granted permission to have up to 1,500 slot machines is likely to reduce the forecasted revenue levels for the Destination Resorts significantly, while also creating a level of uncertainty and risk such that development of competitive Destination Resorts would likely be curtailed.
- Destination Resorts are the best tool to reach the stated goals of creating a healthy, sustainable source of revenue for the Commonwealth and an active source of investment, reinvestment, and jobs. If the Commonwealth were to move forward with one destination resort in each of the three regions, the risk of a fourth entrant will need to be overcome by stakeholders, operators, and the Commonwealth due to the possibility that land in trust is granted to a Native American tribe. Within the industry, this is seen as a significant risk as several jurisdictions have created uneven playing fields in which commercial enterprises are unable to compete, leading to bankruptcies or extensive negotiations and legislative interventions. Furthermore, the incremental risk associated with the potential of four competing facilities at existing and former racing facilities will further undermine the ability of casino resort applicants to put forth proposals and gain financing that will create a facility capable of competing with the highly competitive product and substantial investments in casino resorts located in nearby jurisdictions. In the current financing environment, and with several bankruptcies in the industry, this combined risk has a significant chance of leading to sub-optimal outcomes relative to the stated goals.
- Finally, under this situation where slots are allowed at racetracks, consideration needs to be given to the forecasted revenue numbers for the existing and former race facilities, the potential EBITDA levels that can be achieved (see EBITDA Estimates section) and the ultimate level of building or development that these modest EBITDA levels can support. The modest revenue numbers forecasted would result in EBITDA levels that are likely to not support significant development or refurbishment costs for several of the tracks.
- We do believe that requiring a minimum investment in terms of up-front dollar commitment would not be advantageous. We believe that a well-run RFP process, assuming a reasonable tax rate and other considerations will encourage more potential teams consisting of strong, experienced developers, operators and equity partners, apply. Market demand and the capital markets can determine how much should be invested, although consideration should be given to ensuring that projects are not overleveraged from the beginning by actually limiting the amount of leverage allowed. The addition of the proposed Up-Front fees noted above and the market imposed limitations on debt leverage and equity return

demands will also dictate the parameters for the developments. As noted throughout our study, the capital markets and investor return criteria will determine the level of development that can be supported based upon expected levels of revenues and EBITDA.

- To the extent possible, limit direct restrictions on the casino operating environment. Minimize operating restrictions that would limit revenue potential and/or increase costs. In other words, allow table games, 24-hour gambling, providing of promotional allowances and allowing drinks on the casino floor, extension of credit and other customary operating policies. As in some other jurisdictions we also suggest that Free Play incentives provided to customers be deducted from Gross Win calculations before gaming taxes are applied.
- Smoking policies must be competitive with nearby regional competition. For example, in our analysis, we generally assumed that a minimum portion of the casino gaming floors (i.e. 25%) would allow smoking, although smoking would not be allowed in hotels or restaurants.
- Through the examination of lotteries, the effects of casinos, and growth rates in various situations, it is clear that year over year growth fluctuates highly in lotteries. In short, what our research indicates is that where lotteries are negatively affected by the introduction of casinos into a market, the duration of such effects is limited. States showing a decline the second year after a casino was opened, coinciding with the casino's first full year of operation, were reversed one to two years later. Despite wide array of possible impacts on the lottery, our research suggests that the Massachusetts Lottery is well poised to experience more limited impact than has been seen in other jurisdictions.

### **Maximize Stability in Tax and Regulatory Environment**

- In order to create the stable market environment that will best induce the development of a healthy industry and long-term tourism benefits, offer a guaranteed period during which taxes would remain constant or within a set range.
- In order to create both the reality and appearance of a transparent and legitimate industry to global gaming investors, operators, and patrons alike, it is imperative to create a strong regulatory and oversight mechanism (such as a properly empowered Gaming Control Board) which can enforce the operating guidelines established for the industry. Such an authority will ensure confidence among investors and fairness to gaming patrons. Furthermore, the authority will guarantee that there is no tint of corruption or criminal involvement within the jurisdiction.

## Maintain a Healthy Gaming Industry

- In our opinion, additional fees or levies should be implemented to be used directly to offset community costs and potential negative social impacts associated with the development of gaming. In the House proposal cited, 2.5% of annual gaming revenues are proposed to be set aside for a Public Health Trust Fund to fund programs to deal with potential problem gambling and other potential health and human services issues. Given the level of forecasted gaming revenues, this level of funding would put the State of Massachusetts in the top tier of funding for these types of programs and probably is more than adequate to cover such programs. Setting aside funding in this case 2.5% of gaming revenues to fund Community Mitigation Costs is also good public policy and will go far in dealing with the real costs that local municipalities will likely face. Without knowing the exact locations of where the casino facilities might go, or the extent of the developments and other factors, it is difficult to evaluate whether this formula is adequate or not.
- Consider a requirement that 3.5%-4.0% of annual gaming revenues be set aside for ongoing capital expenditures to ensure that the properties remain competitive, even during possible economic swings. Given the Up-Front fees that are recommended and the fact that the facilities will be new developments, we suggest that this requiring be implemented commencing with the third year of operations.
- Develop a licensing process that is strict yet efficient by working with other jurisdictions, copying their approaches and having reciprocal arrangements to share data, especially for applicants who have received or been denied licenses in other jurisdictions. Ensure that there is adequately trained staff to allow for reasonable turnaround in license applications.

The following table shows the estimated range of gross gaming revenue and ongoing employment that the gaming industry could create based on our findings. As noted above, the incremental risk associated with additional facilities, only some of which can be controlled by the legislature, could lead to an unstable gaming industry and more volatility in this source of revenue for the Commonwealth. In some instances, as detailed in this report, legislatures have had to readdress enabling legislation in order to avoid bankruptcies, create a more competitive environment within and across gaming jurisdictions, and induce stability. We have made every effort to highlight these risks, as well as risk inherent in an overly burdensome development or operating environment. However, such risks increase as additional facilities are added into the competitive environment and should be considered in light of the current debate.

### Summary of Scenarios

(Revenue Estimates Show a Range for First Stabilized Year in Millions USD - )

<b>Scenario 1</b>	<b>Region 1</b>	<b>Region 2</b>	<b>Total</b>				
Revenue (\$)	544 - 672	521 - 711	1,065 - 1,383				
<b>Scenario 2</b>	<b>Region 1</b>	<b>Region 2</b>	<b>Region 3</b>	<b>Total</b>			
Revenue (\$)	523 - 649	504 - 685	422 - 478	1,449 - 1,812			
Jobs (#)	3,426 - 4,222	3,304 - 4,365	2,915 - 3,391	9,645 - 11,978	-		
<b>Scenario 3A</b>	<b>Region 1</b>	<b>Region 2</b>	<b>Region 3</b>	<b>Commercial Region 2</b>	<b>Total</b>		
Revenue (\$)	450 - 578	432 - 608	405 - 460	413 - 435	1,699 - 2,080		
Jobs (#)	3,470 - 4,119	3,351 - 4,216	2,916 - 3,385	2,915 - 3,279	12,653 - 14,999		
<b>Scenario 3B</b>	<b>Region 1</b>	<b>Region 2</b>	<b>Region 3</b>	<b>Region 2 Native American</b>	<b>Total</b>		
Revenue (\$)	446 - 572	426 - 600	404 - 458	449 - 477	1,724 - 2,107		
Jobs (#)	3,385 - 4,116	3,355 - 4,221	2,902 - 3,380	3,301 - 3,505	12,943 - 15,223		
<b>Scenario 3C</b>	<b>Region 1</b>	<b>Region 2</b>	<b>Region 3</b>	<b>Region 2 Native American</b>	<b>Total</b>		
Revenue (\$)	444 - 570	427 - 597	399 - 457	462 - 499	1,733 - 2,124		
Jobs (#)	3,351 - 4,075	3,388 - 4,179	2,873 - 3,346	3,400 - 3,646	13,013 - 15,246		
<b>Scenario 4A</b>	<b>Region 1</b>	<b>Region 2</b>	<b>Region 3</b>	<b>Suffolk Downs</b>	<b>Raynham</b>	<b>Plainridge</b>	<b>Total</b>
Revenue (\$)	482 - 610	465 - 661	415 - 473	185 - 168	93 - 80	95 - 82	1,735 - 2,074
Jobs (#)	3,355 - 4,116	3,382 - 4,336	2,916 - 3,391	659 - 637	427 - 413	427 - 413	11,167 - 13,305
<b>Scenario 4B</b>	<b>Region 1</b>	<b>Region 2</b>	<b>Region 3</b>	<b>Suffolk Downs</b>	<b>Raynham</b>	<b>Plainridge</b>	<b>Total</b>
Revenue (\$)	448 - 570	424 - 622	410 - 464	287 - 265	136 - 121	140 - 124	1,845 - 2,166
Jobs (#)	3,064 - 3,969	3,021 - 4,201	2,886 - 3,382	1,144 - 1,117	616 - 602	616 - 602	11,346 - 13,874

## INTRODUCTION

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The Innovation Group was engaged by the Massachusetts Senate, through State Senator Stanley Rosenberg's office, to provide advisory services in connection with the potential introduction of legislation enabling casino gaming in the Commonwealth of Massachusetts.

The Innovation Group offers extensive experience supporting public entities through complex legislative efforts related to gaming. Our team members are well-versed with the competition and opportunities of the New England and mid-Atlantic markets, having recently provided research, analysis, and operational advisory services for existing and proposed properties in such states as Massachusetts, Connecticut, Rhode Island, Pennsylvania, New York, New Jersey, New Hampshire, Delaware and Maryland.

The Innovation Group's scope of work for which we were engaged included the preparation of a statewide gaming revenue estimates that evaluated the potential gaming revenues that could be generated under a number of alternative development scenarios. An analysis of gaming revenue currently leaving the Commonwealth of Massachusetts to the state's main competitive set, as appreciated by The Innovation Group, and the potential for the proposed Massachusetts gaming facilities' recapture of these fleeing revenues was also undertaken as part of the Gaming Revenue Forecasts.

In addition to completing the gaming revenue estimates, the Senate requested that The Innovation Group complete a limited Economic Impact Analysis, specifically focusing on direct and indirect job creation as well as the fiscal impacts of any proposed licensing fees and gaming taxes. Finally, we were requested to provide an evaluation of the potential impact that the introduction of casino gaming might have on the successful Massachusetts Lottery.

We have segregated our report into several definitive sections covering 1) tax and regulatory overview, 2) gaming revenue estimates, 3) economic impact/benefits to the state, 4) lottery impact, and finally 5) our conclusions.

Our analysis begins with a tax and regulatory overview. Taxes in the gaming industry are usually levied against gross gaming revenue (incorporating some minor adjustments detailed herein), which is the total amount wagered less the total payouts. Compared to other industries which only are taxed on actual profits, it should be understood that taxes applied to gaming have much greater effect on operations than in other industries. Combining this fact with the high fixed capital investments required of the typical casino resort, it should be easy to understand why the determination of a tax structure will have a direct correlation to the ability of Massachusetts facilities ability to compete with facilities located in surrounding states and the sustainability and reliability of the revenue streams they generate.

The tax discussion is therefore critical to our evaluation of the casino revenue potential for the Commonwealth of Massachusetts under several predetermined scenarios. The Innovation Group developed a series of gravity models to generate revenue forecasts. The gravity model in a casino application quantifies the effect of distance on the behavior of a potential patron, and considers the impact of competing venues. As a starting point for the Senate's discussion we used the same tax structure as defined in House Bill 4591. In every instance, the relationship between taxes, capital structure and financing, initial and ongoing capital investments, and sustainability and reliability are critical to understanding the full scope of the revenue estimates disclosed in this report.

A baseline model was established that was calibrated to reflect the current competitive environment of gaming facilities outside of Massachusetts. In completing our work we also established a defined competitive scenario in terms of the assumptions that were utilized regarding regional competition. The baseline was then used to estimate the industry's ability to recapture existing play that would have accrued in neighboring jurisdictions.

### **Region Definitions and Competitive Scenarios**

We were provided basic parameters of the three regions to utilize in our analysis. In general, the regions in the state were defined to reflect population density, travel and traffic patterns, and existing competition in neighboring states. These metrics provide the greatest opportunity for revenue and job creation for the Commonwealth, which are the goals of the proposed legislation. The metropolitan Boston area is home to the majority of the state's population and was therefore a focus of this analysis. Moreover, a great deal of revenue being generated in southern New England originates in Boston and its southern suburbs. Comparatively, the more rural western part of the Commonwealth has two main Interstate highways and a rural population from which, all other things being equal, represents a more modest revenue opportunity. Therefore, and with three regions being the limiting factor, two of those regions were defined to serve the metropolitan Boston area. Region 1 is comprised of the north eastern portion of the state and includes Middlesex, Essex, Worcester, Suffolk Counties and the town of Brookline in Norfolk County. Region 2 covers the south eastern portion of the state and includes the remainder of Norfolk County, as well as Plymouth, Barnstable, Bristol, Dukes and Nantucket counties. Finally, Region 3 covers the western portion of the state and includes Berkshire, Hampshire, Hampden and Franklin counties. It is worth noting that among the various scenarios that The Innovation Group was asked to consider, a portion of them included slot machines at racing facilities. For clarification purposes, of the facilities being considered, Plainridge and Suffolk Downs are existing, operational Horse Racing Tracks that are in contention for slots while Raynham and Wonderland are former dog racing facilities that are non-operational but are also in contention for slot machines.

These scenarios being considered are defined in the table that follows:

## Scenario Summary<sup>1</sup>

Scenario	Description
1	2 Casino Resort Licenses
2	One Destination Resort in each of the 3 Regions <sup>2</sup>
3	One Destination Resort in each of the 3 Regions <sup>2</sup> and one Native American facility in Region 2
4A	One Destination Resort in each of the 3 Regions <sup>2</sup> and 750 slots at each track <sup>3</sup>
4B	One Destination Resort in each of the 3 Regions <sup>2</sup> and 1,500 slots at each track <sup>3</sup>
5	One Destination Resort in each of the 3 Regions <sup>2</sup> , assuming a Native American facility in Region 2, and 750 slot machines in Raynham <sup>3</sup> and Plainridge <sup>3</sup>

Source: The Innovation Group

1) Tax rate assumed to be from House bill

2) 3 Regions:   1: Suffolk, Middlesex, Essex, Worcester County and parts of Norfolk  
                   2: Bristol, Plymouth, Nantucket, Dukes, Barnstable and parts of Norfolk,  
                   3: Hampshire, Hampden, Franklin, and Berkshire

3) Plainridge and Suffolk Downs are existing, operational Horse Racing Tracks that are in contention for slots. Raynham and Wonderland are former dog racing facilities that are non-operational but are in contention for slot machines.

The following map is provided to further demonstrate the 3 regions:

# Massachusetts Region Map for Gaming Consideration



# TAX AND REGULATORY REVIEW

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## *Introduction*

The purpose of this aspect of The Innovation Group's report is to evaluate licensing and regulatory guidelines and potential tax structures for casino gaming in Massachusetts. Due to the highly coordinated nature of oversight for the gaming industry in the United States, regulatory and licensing elements and responsibilities, and tax structures require thoughtful consideration.

Fundamentally implicit to any such discussion is the consideration of the strategic goals and objectives driving the proposed introduction of casino gaming within Massachusetts. The creation of the operating environment is designed to enable the achievement of a set of defined objectives, and a calibration of available policy levers will be necessary to create the desired environment and stave off unintended outcomes.

The Innovation Group understands that the primary goal of introducing casino gaming to Massachusetts is to enhance economic development, including revenue to the state, and job creation. We also understand that this objective is not just short-term in nature. The Commonwealth appears focused on ensuring that the gaming industry in Massachusetts is sustainable and competitive for the foreseeable future.

Recently, several jurisdictions, including Maryland, have enacted gambling legislation and have structured regulations that, in our opinion, are more oriented towards maximizing tax revenue in the short term. In addition to high effective tax rates on gross gaming revenue, significant up-front licensing fees have been enacted. These efforts, both in Maryland and other jurisdictions, provide examples on the inflection points in the trade-off between tax and licensing revenue for the state along with the need to provide operators with the tools they need to create a reliable and resilient source of jobs and revenue in all economic conditions. The data indicates that both significant up-front fees and/or high rates on gaming revenue, while perhaps maximizing revenues in the short-term, can be counter-productive to the long term success and viability of an industry.

Jurisdictions enacting gaming throughout the world do so for a number of reasons. As noted, recently, some jurisdictions that have recently enacted gaming legislation were dealing with circumstances driving them to chase incremental tax revenues in the short term (such as in the State of Maryland and the State of New York or as is presently being considered by the Governments of Brazil and Mexico). Still others have considered gaming for the purpose of pure economic development, such that the ultimate aim is to create a new industry that will be sustainable in the long-term (for example in states such as Mississippi and Nevada in the U.S.).

We understand that Massachusetts is focused on developing an industry that is sustainable and competitive for the long term. Hence, projects that are ultimately built must be substantial and offer the kind of experience that will make them competitive with other

regional casino destinations. In order to attract the substantial capital necessary to develop competitive destination properties in today's capital markets, the Commonwealth must develop a tax structure that strikes a balance between

(1) driving short term tax revenue, (2) providing a structure that is stable, (3) providing developers with the ability to raise the capital that they need , and (4) providing a fair return for the risk involved.

Finally, Massachusetts is starting out at somewhat of a competitive disadvantage in that many other jurisdictions in the region already have gaming (Rhode Island, Connecticut, and New York). Facilities in these states have had the advantage of marketing and operating for many years to residents in the region and have developed substantial databases of customers (which means they have identified the better players that are now entrenched in their player reward programs). Consequently, any legislation in Massachusetts needs to recognize that potential developers and operators of facilities will be entering a highly competitive environment and will need the financial and marketing flexibility to effectively compete with other regional facilities.

Numerous jurisdictions around the world have enacted legislation for casino gaming and corresponding tax structures based upon the type of gaming introduced, licensing schemes, number of locations, overall objectives, and other factors. This document attempts to utilize information from numerous jurisdictions in evaluating various tax structures across the spectrum of regulatory environments, the impacts that various structures have had on the industry, and the economic development that flows from it. Through this analysis, it also ultimately recommends a structure for proposed casino gaming in Massachusetts.

### *Benefits of a Healthy Gaming Industry*

How successful or competitive will a state's gaming industry be? The answer to that question lies largely in the tax rate and license fee that will be levied and how that is actually accomplished.

Simply stated, lower tax rates lead to a healthier gaming industry and an increase in capital investments in facilities. This occurs because additional capital investment results in higher gaming revenue and thus higher gaming taxes (levied) for governmental entities. In addition, capital investment supports economic expansion, which includes jobs and ancillary investment in the gaming communities, as well as a higher quality experience for customers. The industry will exhibit long-term viability featuring steady growth as facilities expand. In the end, the state as a whole benefits from higher tax revenue, economic expansion, a competitive gaming product, and ultimately, a more viable industry.

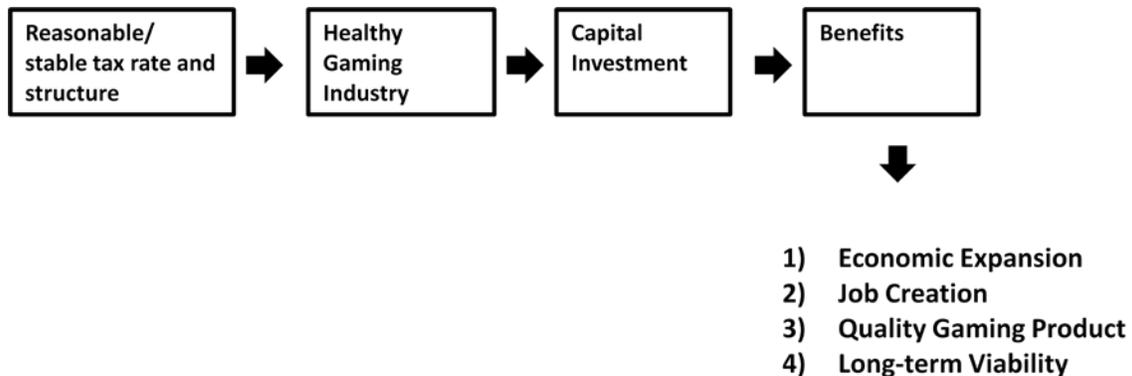
This is certainly expected to be the case in Massachusetts, where large, attractive, successful facilities in neighboring states will compete against facilities introduced in Massachusetts. While the facilities in Massachusetts may be better located to capture consumers originating in the state, the properties will still need to be of a high enough quality to attract potential guests, particularly customers that have come to expect the higher quality amenities and rewards programs that have been developed in such jurisdictions as Connecticut. When

looking at gaming enactment, many state legislators focus on two metrics:

1. Recapture of dollars being gambled by in-state residents at venues in surrounding states.
2. Attraction of gaming dollars from out-of-state residents that can then be taxed.

While convenience plays a central role in determining these metrics, tax rates and up-front license fees are also key determinants. If a facility in one state has been burdened proportionately more by a high effective tax rate and a high license fee than a competitor in another state, it is typically a given that the capital investment will be less. As a result the facility will be less competitive, and will attract out-of-state games and recapture in-state gamers at a much lower level than would be achieved if the tax rates and license fees were lower. Over the long run, the creation of a healthy industry will result in more benefits to the state than one that is overly burdened by taxes and license fees.

In order to maximize capital investment for a gaming market, and its competitiveness, proposed new projects and expansion projects must achieve a certain level of profitability. In the gaming industry, the profitability of a project is highly dependent on both the gaming tax burden and the license fee. Profitability is necessary in order to attract capital to the market. The amount of capital and the cost of capital will be dependent on the risk profile of the market. Capital investment and tax rates in the gaming industry are inversely related. An unreasonably high effective tax rate, license fee or an unstable rate environment will increase the risk profile of a project and thereby reduce the amount of capital available and hence the competitiveness of the industry. Lower tax rates, while spurring more capital investment will also inevitably lead to increased job creation. The end result if these factors are not considered carefully will be inferior facilities that are less competitive resulting in lower revenues and in the long run less taxes to the state.



### Approach to Our Analysis

The goal of this aspect of our analysis is to define the optimal policy approach for the inducement of the desired market outcome as it relates to the establishment of casino gaming in Massachusetts. In its broadest form such an analysis must accomplish the following:

1. Define Massachusetts objectives regarding proposed gaming legislation;
2. Understand the market environment necessary to meet stated objectives;
3. Identify available policy tools for creating said environment; and
4. Define specific policies from amongst available policy tools to achieve goals within the context of Massachusetts set of circumstances.

As noted in the introduction, the primary goals of introducing gaming to Massachusetts are to generate state revenue and create jobs while creating a sustainable industry that is competitive for the long term. With the goals identified, we can now proceed to the analysis necessary to address the remaining three items above.

In order to understand the market environment necessary to meet stated objectives we completed several steps as summarized below.

First, we performed a comparative analysis of various gaming policies. This aspect of our overall study compares and contrasts the tax structures and regulatory mechanisms associated with various casino style and racino<sup>1</sup> gaming jurisdictions throughout the U.S. The regulatory environment spectrum includes restricted versus unrestricted gaming situations and limited competition versus the free-market approach towards competition. In addition, the study also reviews the efficacy of license fees and other up-front requirements

We then proceeded to compile a selection of jurisdictional experiences in order to explore the intent of the policies enacted against actual outcomes in a variety of market contexts. The study analyzes the tax rate structures relative to the different regulatory environments and the level of competition associated with gaming in various jurisdictions. The dynamics of this relationship are identified in respect to the unique evolution in the different jurisdictions analyzed. The goal of this analysis is not to present an exhaustive list of outcomes, but rather to highlight examples The Innovation Group believes are relevant to the design of enabling policies. The themes examined are as follows:

- Effects of an Unreasonable and/or Unstable Tax Rate;
- Successful Tax Rate Environments; and
- Up-front licensing fees and development commitments.

The continuing global proliferation of casino gaming into new markets and rampant one-upmanship often elicited by casino developers in various jurisdictions continuously changes the “rules of the game” for each new gaming jurisdiction. This dynamic has resulted in enhanced competitive scenarios and the reality of diminished benefits for new entrants compared to historical examples. Such is the reality faced by U.S. states enacting or liberalizing gaming laws as part of an attempt to stimulate economic development or lure more tourists in an increasingly competitive global tourism market. We believe the perspective presented by reviewing a range of examples (not simply a sample limited to the

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<sup>1</sup> A **racino** is a combined race track and casino. In most cases, the gambling is limited to slot machines (sometimes referred to as Video Lottery Terminals, or VLT’s), but some locations (particularly within the U.S.) are beginning to include table games.

collection of most applicable Massachusetts comparables) is the best way to draw experiential insight into our analysis.

In order to identify policy tools available to the government which could be used to shape the development of the industry, we compiled the general lessons to be learned from evidence collected. In addition to economic expansion, jurisdictions enacting gaming need to consider how to implement policy tools and tax structures that maximize gaming revenues in the long term and enable developers to offer a quality gaming product that allows them to compete effectively and create an industry with long term viability.

We have also included a discussion on the importance of setting these policies up-front, and describe how the concepts of *profit* and *capital investment* directly relate to each. Namely, explored how the level to which any one, or all of these, can be achieved is directly determined by the level of capital investment in the market, and, indirectly determined by the factors that drive the investment decision (i.e. profitability). While no jurisdiction can control all of the factors to be discussed, many are heavily influenced by the appropriateness of tax and regulatory policies designated by the government.

The heart of this section focuses on the importance of tax balancing; weighing the needs of government entities that would rely on gaming tax revenue along with the need for a healthy industry. The analysis shows how the gaming tax structure as well as the consideration of up-front fees weigh on profitability thus affecting the amount of capital that is potentially made available for a project.

Having addressed the general implications our findings have on policy development, we draw these conclusions into the context of our market analysis in order to achieve the objective of our study when it comes to policy recommendations.

When addressing the tax structure aspect of potential gaming in Massachusetts, we have segregated the discussion into two segments; 1) taxes on ongoing operations and 2) up-front licensing fees. Up-front licensing fees need to be considered as an ancillary or related point in any tax discussion as such fees also play into the capital investment decision. For the purpose of this analysis, we do consider them as related tax structure elements.

## ***Tax Structures and Effective Tax Rates***

The tax rate study was limited to major U.S. gaming jurisdictions that offer full-service casinos or racetrack casinos (also known as racinos), excluding Native American casinos.

### **Full-Service Casino Jurisdictions**

This section analyzes the tax rate structures for full-service casino jurisdictions including Missouri, Indiana, Illinois, Iowa, Colorado, Mississippi, Louisiana, New Jersey, and Nevada. We point out that all of these jurisdictions are all fairly mature. Missouri

Missouri levies a flat gaming tax rate of 21% on gaming revenue and collects a \$2 admission fee per person per simulated excursion. The casinos are also charged a regulatory fee associated with state enforcement agents assigned to each casino, although nominal in

comparison to the gaming tax and admission fee. The resulting effective tax rate<sup>2</sup> for Missouri was 27.2% for FY to date 2010. The gaming tax rate increase by 1.0% in 2007 in conjunction with legislation that removed the \$500 loss limit and capped the number of available gaming licenses at twelve. This was the only change in the tax structure since the inception of gaming in 1994.

## Indiana

Indiana utilizes a graduated gaming tax structure with a top rate of 40% for gaming revenue over \$600 million (graduated schedule shown below). The state also imposes a \$3.00 admission fee. The effective tax rate in Indiana was 31.9% for FY 2009. In 2002, the tax structure changed from a flat rate of 20% to the graduated structure. The graduated structure increased the effective tax rate by about 5%. The impact of the higher effective rate was mitigated almost completely by rule changes which allowed the casinos in Indiana to permanently dock, thus enhancing customer convenience and in turn increasing gaming revenue. Note also that the top bracket was recently added. The following chart displays the current graduated tax schedule in Indiana:

<b>Indiana Graduated Schedule</b>	
<b>Tax Bracket (AGR)</b>	<b>Current Rate</b>
Less than \$25 million	15%
\$25 - \$50 million	20%
\$50 - \$75 million	25%
\$75 - \$150 million	30%
\$150 - \$600 million	35%
Greater than \$600 million	40%

Source: Indiana Gaming Commission

## Illinois

Illinois also utilizes a graduated gaming tax structure with a top rate of 50% for gaming revenue over \$200 million (graduated schedule shown below). The state also charges a \$3.00 admission fee. The effective tax rate for Illinois was 34.7% in CY 2009, the highest rate in the non-racino segment. The tax rate structure in Illinois has been extremely dynamic over the years, changing a total of four times since 1998. In 1998, Illinois changed from a flat tax rate of 20% to a graduated structure with a top rate of 35% for gaming revenue greater than \$150 million. In June 2002, the top rate increased to 50% for revenue greater than \$200 million and the admission fee increased by \$1. In June 2003, the top rate increased to 70% for gaming revenue over \$250 million, resulting in an effective rate of 46.3% (FY 2004). The rates were subsequently rolled back to the June 2002 level in 2005. The following chart displays the current graduated tax schedules for Illinois.

<sup>2</sup> Effective Tax Rate: The rate a taxpayer would be taxed at if taxing was done at a constant rate, instead of progressively. Effective tax rate is calculated as total tax paid divided by aggregate taxable income.

### **Illinois Graduated Schedule**

<b>Tax Bracket (AGR)</b>	<b>Current Rate</b>
Less than \$25 million	15.0%
\$25 - \$50 million	22.5%
\$50 - \$75 million	27.5%
\$75 - \$100 million	32.5%
\$100 - \$150 million	35.0%
\$150 - \$200 million	45.0%
Greater than \$200 million	50.0%

Source: Illinois Gaming Commission

### **Iowa**

Iowa also utilizes a graduated gaming tax structure although it contains only three tax brackets with a top rate of 22% for gaming revenue over \$3 million (graduated schedule shown below). The structure, in effect, approximates a flat tax of about 22% since all the casinos generate gaming revenue well in excess of \$3.0 million. The state also collects a fairly nominal regulatory fee from each casino. The resulting effective tax rate for Iowa was 22.6% for FY to date 2010, stable in comparison to prior years. The following chart displays the current graduated tax schedule for Iowa.

### **Iowa Graduated Schedule**

Less than \$1 million	5.00%
\$1 - \$3 million	10.00%
Greater than \$3 million	22.00%

Source: Iowa Racing and Gaming Commission

### **Colorado**

The Colorado Limited Gaming Control Commission (“CLGCC”) establishes the tax rate structure on an annual basis. The commission hears testimony from various sources before making the tax rate decision for the upcoming year. Colorado has employed a graduated tax structure since the inception of gaming in 1991. There have been a total of six rate structure changes, which either added additional tax brackets or changed the rate associated with a particular tax bracket.

The initial tax rate structure (1991) featured three rate thresholds (tax brackets) with a bottom rate of 4% on gaming revenue less than \$440,000 and a top rate of 15% on revenue greater than \$1.2 million. The current rate structure has six tax brackets with a top rate of 20% on revenue greater than \$13 million. The current tax rate structure has been in place since July 2008 and is displayed below. Based on the revenue profile of the Colorado casinos, the resulting effective tax rate for FY to date 2010 was 13.3%.

### **Colorado Tax Rate Structure**

Tax Bracket (AGP)	Current Rate
Less than \$2 million	0.25%
\$2 - \$5 million	2.00%
\$5 - \$8 million	9.00%
\$8 - \$10 million	11.00%
\$10 - \$13 million	16.00%
Greater than \$13 million	20.00%

Source: Colorado Limited Gaming Control Commission

### **Mississippi**

Mississippi utilizes a graduated gaming tax structure for both the state gaming tax and a local government fee. The graduated structure has only three tax brackets as outlined below. The gaming revenue threshold associated with the first two tax brackets is low enough that the effective tax rate is nearly equal to the top tax rate. The top tax rate for the state gaming tax and local government fee is 8.0% and 0.8%, respectively. The local governments hosting the casinos also collect a flat gaming tax of 3.2%. In summary, the effective tax rate in Mississippi is roughly 12.0%. The rate has not change since the inception of gaming in 1993.

### **Mississippi Gaming Tax Structure**

<b>State Gross Revenue Fees</b>	
First \$50,000 Monthly Gross Revenue	4.0%
Next \$84,000 Monthly Gross Revenue	6.0%
All Monthly Gross Revenue over \$134,000	8.0%
<b>Local Government Fee</b>	
First \$50,000 Monthly Gross Revenue	0.4%
Next \$84,000 Monthly Gross Revenue	0.6%
All Monthly Gross Revenue over \$134,000	0.8%
<b>Local Gaming Tax (flat rate)</b>	<b>3.2%</b>

Source: Mississippi State Tax Commission

### **Louisiana**

Louisiana imposes a flat tax of 21.5% on gaming revenue for all riverboats. The effective tax rate on the sole land-based casino (Harrah's) is approximately 22%, thus the overall effective rate on riverboat/land-based gaming in Louisiana equates to 21.7%. The gaming tax structure has not changed since the inception of gaming.

### **New Jersey**

The State of New Jersey levies a gaming tax equal to 8.0% on "taxable" gaming revenue. Taxable gaming revenue equals gross gaming revenue less promotional gaming credits. These promotional credits reflect "free play" or machine credits given to the player. Therefore, the effective tax rate calculated to about 7.5% in CY 2009.

The casinos also incurred \$49.3 million in reinvestment obligations in 2009, equal to 1.25% of gross gaming revenue. The casinos are eligible to invest the accrued amount in projects approved by the Casino Reinvestment Development Authority. The rate environment in New Jersey has been relatively stable since the inception of gaming in the state.

## Nevada

Nevada imposes various taxes and fees related to gaming including a gaming tax (percentage fee) and an annual and quarterly slot machine and table game device fee. The gaming tax rate is 3.5% on the first \$50,000 in gaming revenue during the month, 4.5% on the next \$84,000, and 6.75% on revenue exceeding \$134,000. Again, due to the low revenue threshold associated with the first two revenue brackets, the average gaming tax rate of 6.70% roughly approximates the top rate. After taking into consideration the device fees, the overall effective tax rate for Nevada for FY to date 2010 was about 7.2%.

## Summary

In summary, the effective tax rates for the full-service casino jurisdictions ranged from a low of 7.2% for Nevada to a high of 34.7% for Illinois. The simple average calculated to about 20%, as displayed in the table below.

Jurisdiction	Reporting Period	Gaming Tax	Admission Fee	Other	Total Taxes & Fees	Gross Gaming Revenue	Effective Tax Rate
Missouri	FY 2010 *	\$303,813,959	\$88,975,284		\$392,789,243	\$1,446,733,136	27.2%
Indiana	FY 2009	\$689,034,220	\$78,883,872		\$767,918,092	\$2,408,297,251	31.9%
Illinois	CY 2009	\$452,129,720	\$43,256,280		\$495,386,000	\$1,429,318,000	34.7%
Iowa	FY 2010 *	\$164,162,191		\$9,902,212	\$174,064,403	\$771,454,785	22.6%
Colorado	FY 2010 *	\$84,782,710			\$84,782,710	\$636,557,387	13.3%
Mississippi	FY 2010 *	\$236,816,145			\$236,816,145	\$2,009,672,122	11.8%
Louisiana	FY 2010 *	\$358,743,592			\$358,743,592	\$1,656,810,083	21.7%
New Jersey	CY 2009	\$295,308,693			\$295,308,693	\$3,943,124,171	7.5%
Nevada	FY 2010 *	\$487,510,048		\$33,207,972	\$520,718,020	\$7,281,343,537	7.2%
<b>Simple Average</b>							<b>19.7%</b>

\* Reflects the 10 months ended April 2010.

Source: Various Gaming Commissions; The Innovation Group

## Racetrack Casino Jurisdictions

This section discusses the gaming tax structure for various racino jurisdictions in the U.S. including Iowa, West Virginia, Delaware, New Mexico, New York, Indiana, Oklahoma, Pennsylvania, Florida, Kansas and Maryland. Only properties with a racetrack component within these jurisdictions are addressed in this section.

## Iowa

In addition to the riverboat casinos, Iowa operates three racinos. The racinos offer both Class III slot machines and table games. The tax rate structure for the racinos is almost identical to the riverboat casinos with a few of exceptions. For racinos that operate in a county with no other licensees, the top rate is 24%. For racinos that have a table game license and generate more than \$100 million in gaming revenue, the top rate is also 24%. Two of the three racinos pay the higher rate structure, as displayed below.

### **Iowa Graduated Schedule – Racinos**

Less than \$1 million	5.0%
\$1 - \$3 million	10.0%
Greater than \$3 million	24.0%

Source: Iowa Racing and Gaming Commission

In addition, racing purses are generally funded via gaming revenue. We estimated that about 7% of gaming revenue is directed to the racing industry. Therefore, we estimated that the all-in effective tax rate for racetrack casinos in Iowa was about 30% (FY to Date 2010).

### **West Virginia**

West Virginia has four racinos regulated by the West Virginia Lottery Commission. The racinos feature Class III slot machines and a full-scope of table games. Table games were recently approved in West Virginia, largely in response to gaming competition from Pennsylvania. Slot revenue and table revenue are taxed differently.

### **Slot Revenue**

The slot machine revenue, called Taxable (excluding promotional credits known as free play) Gross Terminal Revenue (“GTR”), is impacted by various allocations and then distributed to various pools based on a complicated formula. GTR is distributed to various state funds, local municipalities, the racing industry and the racetrack operators. The racing industry distribution is divided between purses and various breed development funds. The racetrack’s share includes an amount obligated for approved capital projects, but nonetheless benefits the racetrack operators. In summary, the effective tax rate calculated to about 56.8% for FY to date 2010, reflecting the following summarized distribution schedule.

#### **Distribution of GTR**

State Funds *	44.1%
Local Governments	1.9%
Racing Industry	10.9%
Racetrack Operators	43.2%
<b>Total</b>	<b>100.0%</b>

\* Includes lottery administrative costs and racing commission funding.

Source: The Innovation Group

### **Table Revenue**

Regarding the table sector, the state only levies a privilege tax of 35% against adjusted gross receipts. From the privilege tax fund, an amount is distributed to a purse fund and breed developments funds equal to 2.5% and 2.0% of adjusted gross receipts, respectively.

### **Delaware**

Delaware contains three racetrack casinos, all offering Video Lottery Terminals (“VLTs”). The VLT operations are, by statute, operated and administered by the Delaware State Lottery Office (“Lottery”). Unlike many states, the Lottery owns and maintains the machines. The State of Delaware recently passed legislation that increases the state’s share of VLT revenue from about 36% to 44%, generally at the expense of the racetrack operators. The video lottery revenue is distributed as follows, resulting in an effective tax rate of about 56.9% (CY 2009). This rate is expected to increase to 60% as the full year effect of the new legislation is realized.

### **Revenue Distribution Summary**

State	40.3%
Racing Purses	10.5%
Racetracks	43.1%
Vendor fees	6.0%
<b>Total</b>	<b>100.0%</b>

Source: Delaware State Lottery

Delaware also recently approved table games at racetrack casinos. We understand that the racino operators will retain 66.1% of table revenue, with the state and racing industry receiving 29.4% and 4.5%, respectively. Therefore, the effective tax rate for the table sector calculated to about 33.9%.

### **New Mexico**

New Mexico features five racetracks that offer Class III slot machines. The racinos can operate a maximum of 750 machines. The state imposes a flat gaming tax rate of 26% against machine revenue. In addition, 20% and 0.25% of machine revenue are distributed to purses and a problem gambling fund, respectively. Therefore, the effective tax rate (including the purse distribution) was 46.2% for FY to date 2010 for New Mexico racetrack casinos. The effective rate has been relatively stable over the last several years.

### **New York**

New York has eight racinos offering VLTs. Early results at active racinos were disappointing because of the small share of revenue distributed to the operators. In April 2005, Governor George Pataki approved a bill increasing the share of VLT revenue that New York racetracks could retain. Under this new deal, tracks retain 32% of the first \$50 million in annual VLT revenue, 29% of the next \$100 million, and 26% on anything above that amount. In addition, lawmakers added a new, "marketing and promotional" payment that would provide an additional 8% on the first \$100 million in VLT revenue, and 5% on everything over that figure. For Yonkers and Aqueduct, "marketing and promotional" expenses are capped at 4% of VLT revenue.

However, racinos continued to struggle with some tracks on the verge of bankruptcy. Many owners cited that the relief was not sufficient to ensure the financial health of some of the smaller tracks in upstate New York, which compete directly with Native American casinos that are either untaxed or share revenue at a much lower rate. The legislature, once again, revisited the issue and passed S3830 in February 2008. The purpose of S3830 was to increase the distribution to racetrack operators under limited conditions. The state currently utilizes several graduated distribution schedules as shown below.

### Graduated Tax Structure - Batavia / Tioga

Tax Bracket	Education Contribution	Racetrack Commission	Marketing Allowance	Lottery Admin	Capital Award
Less than \$50 million	40.0%	36.0%	10.0%	10.0%	4.0%
\$50 - \$62.5 million	47.0%	29.0%	10.0%	10.0%	4.0%
\$62.5 - \$100 million	51.0%	29.0%	10.0%	10.0%	0.0%
\$100 - \$150 million	53.0%	29.0%	8.0%	10.0%	0.0%
Greater than \$150 million	56.0%	26.0%	8.0%	10.0%	0.0%

Source: New York Lottery

### Graduated Tax Structure - Fairgrounds / Finger Lakes / Saratoga / Vernon

Tax Bracket	Education Contribution	Racetrack Commission	Marketing Allowance	Lottery Admin	Capital Award
Less than \$62.5 million	34.0%	42.0%	10.0%	10.0%	4.0%
\$62.5 - \$100 million	38.0%	42.0%	10.0%	10.0%	0.0%
Greater than \$100 million	40.0%	42.0%	8.0%	10.0%	0.0%

Source: New York Lottery

### Graduated Tax Structure – Monticello

Tax Bracket	Education Contribution	Racetrack Commission	Marketing Allowance	Lottery Admin	Capital Award
Less than \$100 million	38.0%	42.0%	10.0%	10.0%	0.0%
Greater than \$100 million	40.0%	42.0%	8.0%	10.0%	0.0%

Source: New York Lottery

### Graduated Tax Structure – Yonkers

Tax Bracket	Education Contribution	Racetrack Commission	Marketing Allowance	Lottery Admin	Capital Award
Less than \$62.5 million	44.0%	34.0%	8.0%	10.0%	4.0%
Greater than \$62.5 million	48.0%	34.0%	8.0%	10.0%	0.0%

Source: New York Lottery

On a weighted average basis for FY to date 2010, machine revenue was distributed as follows.

#### Revenue Distribution Summary

Education Contribution	44.7%
Racetrack Commission	35.0%
Marketing Allowance	8.8%
Lottery Administration	10.0%
Capital Award	1.4%
<b>Total</b>	<b>100.0%</b>

Source: New York Lottery

Based on the assumption that the Marketing Allowance and Capital Award benefit the racetrack operation, we determined the effective gaming tax rate to be 54.7%, reflecting the combination of Education Contribution and Lottery Administration transfer.

However, we also estimated that the racinos distribute about 8.75% of VLT revenue to racing

concerns, mainly reflecting purses and breed development funds. Therefore, the overall effective tax rate calculated to 63.5%.

## Indiana

In addition to the riverboat casinos, Indian operates three racinos. The racinos offer Class III slot machines only. Like the riverboat sector, the racino sector utilizes a graduated structure (displayed below) with a top rate of 35% on gaming revenue over \$200 million, as displayed in the table below. In contrast to the riverboats, the racinos in Indiana do not pay an admission fee.

### Indiana Graduated Schedule - Racinos

Tax Bracket (AGR)	Current Rate
Less than \$100 million	25%
\$100 - \$200 million	30%
Greater than \$200 million	35%

Source: Indiana Gaming Commission

The racinos also distribute 15% of gaming revenue to racing concerns, mainly reflecting purses and breed development funds. Therefore, the overall effective tax rate calculated to 42.6%.

## Oklahoma

Oklahoma contains three racetracks casinos, including Blue River Downs, Will Rodgers Downs and Remington Park, all offering Class III slot machines. The racinos are regulated by the Oklahoma Horse Racing Commission. By stature, gaming revenue is distributed to various state funds, the horse racing industry and the racetracks, per the graduated schedule outlined below.

### Oklahoma Graduated Distribution Schedule

Tax Bracket (AGR)	Tax Commission	Racing Industry	Racetrack
Less than \$10 million	10.0%	25.0%	65.0%
\$10 - \$30 million	10.0%	30.0%	60.0%
\$30 - \$40 million	15.0%	30.0%	55.0%
\$40 - \$50 million	20.0%	25.0%	55.0%
\$50 - \$70 million	25.0%	22.5%	52.5%
Greater than \$70 million	30.0%	20.0%	50.0%

Source: Oklahoma Horse Racing Commission

Based on gaming revenue for CY 2009 by racetrack, 14.6% and 27.2% of gaming revenue was distributed to the state and the racing industry, respectively. Therefore, the racetracks retained 58.2% of revenue, resulting in an effective tax rate of 41.8%.

### Revenue Distribution Summary

State Taxes	14.6%
Racing Industry	27.2%
Racetrack	58.2%
<b>Total</b>	<b>100.0%</b>

Source: The Innovation Group

## Pennsylvania

The tax structure for the racinos in Pennsylvania includes a 34% gaming tax for local property tax relief, a 4% gaming tax for local governments, a 5% gaming tax for statewide economic development and a 12% gaming tax for a horsemen fund to support racing purses. Therefore, the effective tax rate for racetracks was about 55% for FY to date 2010, and has remained stable since the inception of gaming in Pennsylvania.

Table games were recently approved in Pennsylvania. We understand that the gaming tax rate for the state and local government is 14% and 2%, respectively. Note that the state rate for the first two years of operation is only 12%.

## Florida

Florida currently hosts five racetrack casinos, two of which opened in the last 12 months. The State of Florida levies a gaming tax of 50% against net slot revenue. Operators are allowed to deduct a promotional credit, representing free play, from gross slot revenue. Each operator also pays an annual state license fee equal to \$3.0 million. In addition, local governments receive a percentage of net slot revenue, based on negotiations with the local municipalities (county and city), generally in the 3.0% range. Therefore, we estimated the effective tax rate for FY to date 2010 at about 59.3%.

**However, per recent legislation, the state gaming tax rate is scheduled to decline from 50% to 35% for the second half of 2010. This adjustment is being made in an attempt to help the industry compete against existing Native American facilities that are not subject to taxes.**

Purse contributions are negotiated with the horsemen leading to a further loss in operating income for the racetrack casino operators. These racetrack casinos compete with well-established Native American casinos in the area, which have historically paid no taxes and therefore been able to make substantial investments in facilities, marketing, and player development.

## Kansas

In late April 2007, Senate Bill 66 (“SB66”) was signed into law allowing for the development of various destination casinos and racetrack casinos in Kansas.

### Destination Casinos

The bill contemplates four destination casinos, owned and operated by the Kansas Lottery. The designated locations include the following counties in Kansas: Wyandotte County, Ford County, one casino in either Cherokee or Crawford County, and one casino in either Sumner or Sedgwick County. However, each jurisdiction must approve gaming via a countywide vote. The vote passed in every county but Sedgwick. In addition, the capital investment associated with these developments must exceed \$225 million (\$50 million for the Ford County facility). The management company must also pay a \$25 million privilege fee (\$5.5 million for the Ford County facility).

The tax rate on gaming revenue was set at 27%; with 22%, 3% and 2% going to the state, local government and a problem gambling fund, respectively. State revenues would be deposited in the Expanded Lottery Act Revenues Fund, designated for the reduction of state debt, state infrastructure improvements (i.e. deferred maintenance at public universities) and local government property tax relief. The legislation dictates that 15-year contracts would be signed with the casino management company.

### **Racetrack Casinos**

Under that bill, the three existing racetracks, including The Woodlands in Kansas City, the Wichita Greyhound Park in Valley Center (near Wichita) and Camptown Racetrack in Frontenac, would divide 2,200 slot machines, although the exact distribution is uncertain. Again, the vote failed for Wichita Greyhound’s host county (Sedgwick), which means the other two racetracks could get more slots. An additional 600 slot machines would be available through an auction process selling licensing rights at a starting bid of \$2,500 per machine. The racino gaming revenue would be divided as follows:

#### **Racino Gaming Revenue Distribution Summary**

Beneficiary	Percentage	Comment
State	40%	
Facility Owner	25%	
Kansas Lottery	15%	For expenses
Greyhound Purses	7%	Max of \$3750 per machine, per year
Thoroughbred Purses	7%	Max of \$3750 per machine, per year
Local Government	3%	
Problem Gaming Fund	2%	
Fair Fund	1%	Support fair pari-mutuel racing

Source: Legislative Summary

Both the Woodlands and Wichita Greyhound have since closed—Wichita’s casino rights vetoed away by the county in which it resides, and the Woodlands failing to reach agreement with the state Lottery on a re-working of the above tax distribution which it felt prohibitive to profitable operation within the market. Thus, racinos are not in Kansas’ immediate future.

### **Maryland**

In November 2007, Maryland passed House Bill 4 (“HB4”), allowing for a referendum on the legalization of VLTs. The bill permits a maximum of 15,000 VLTs at five pre-determined locations. The following is a list of the locations, the number of terminals allowed and other specified stipulations.

### **Maryland Operator License Locations**

Location	# Units Allowed	Stipulations
Ann Arundel County	4,750	Within two miles of MD Route 295
Baltimore City	3,750	Within ½ mile of MD Rt. 295 on property owned by the City
Cecile County	2,500	Within two miles of Interstate 95
Allegany County	1,500	Located within the Rocky Gap State Park
Worcester County	2,500	Within one mile of the intersection of Route 50 and Route 589

Source: Maryland House Bill 4

VLT operators must pay an initial license fee of \$3.0 million and invest at least \$25.0 million for every 500 VLTs in operation. VLT revenue is distributed as follows:

### **Maryland VLT Revenue Distribution**

Education Trust Fund	48.5%
Horse Racing Purses	7.0%
Local Impact Grants	5.5%
Racetrack Facility Renewal	2.5%
Lottery Agency	2.0%
Small, Minority and Women-Owned Businesses	1.5%
VLT Operator	33.0%
<b>Total</b>	<b>100.0%</b>

Source: House Bill 4; The Innovation Group

Therefore, the effective tax rate was set at 67%. In addition, the legislation imposed an annual fee of \$425 per VLT and directs the funds to a problem gambling fund. This fee increases the effective tax rate, the amount of which depends ultimately on revenue levels.

As a result of the high tax rate and other fees, coupled with other restrictions, and despite the regulated limit on licenses, only six applications were received for the five potential licenses. These applications represented bids for less than half the potential gaming positions contemplated by the state.

### **Summary**

The effective tax rates (as a percent of gross gaming win) for the racino segment range from a low of 30.0% for Iowa to a high of 63.5% for New York. The simple average for the group (equal weighting) calculated to approximately 50%.

### U.S. Effective Gaming Tax Rates - Racino Jurisdictions

State	Period	Gaming Taxes & Fees	Racing Distributions	Other	Subtotal Distributions	Slot / VLT Revenue	Effective Tax Rate
Iowa	FY 2010 *	\$79,423,022	\$25,275,372	\$3,148,546	\$107,846,940	\$360,017,946	30.0%
West Virginia	FY 2010 *	\$299,952,861	\$71,352,788		\$371,305,649	\$653,328,184	56.8%
Delaware	CY 2010	\$261,554,500	\$59,373,000		\$320,927,500	\$564,240,300	56.9%
New Mexico	FY 2009 *	\$66,881,511	\$51,447,316	\$643,091	\$118,971,918	\$257,236,581	46.2%
New York	FY 2010 **	\$567,686,216	\$90,750,464		\$658,436,680	\$1,037,148,160	63.5%
Indiana	FY 2009	\$107,761,635	\$58,654,396		\$166,416,031	\$391,029,304	42.6%
Oklahoma	CY 2010	\$13,783,895	\$25,558,054		\$39,341,949	\$94,129,725	41.8%
Pennsylvania	FY 2010 *	\$767,683,156	\$214,167,706		\$981,850,862	\$1,785,309,675	55.0%
Florida	FY 2010 *	\$126,513,754		\$15,000,000	\$141,513,754	\$238,705,197	59.3%
<b>Simple Average</b>							<b>50.2%</b>

\* Reflects the 9 months ended April 2010.

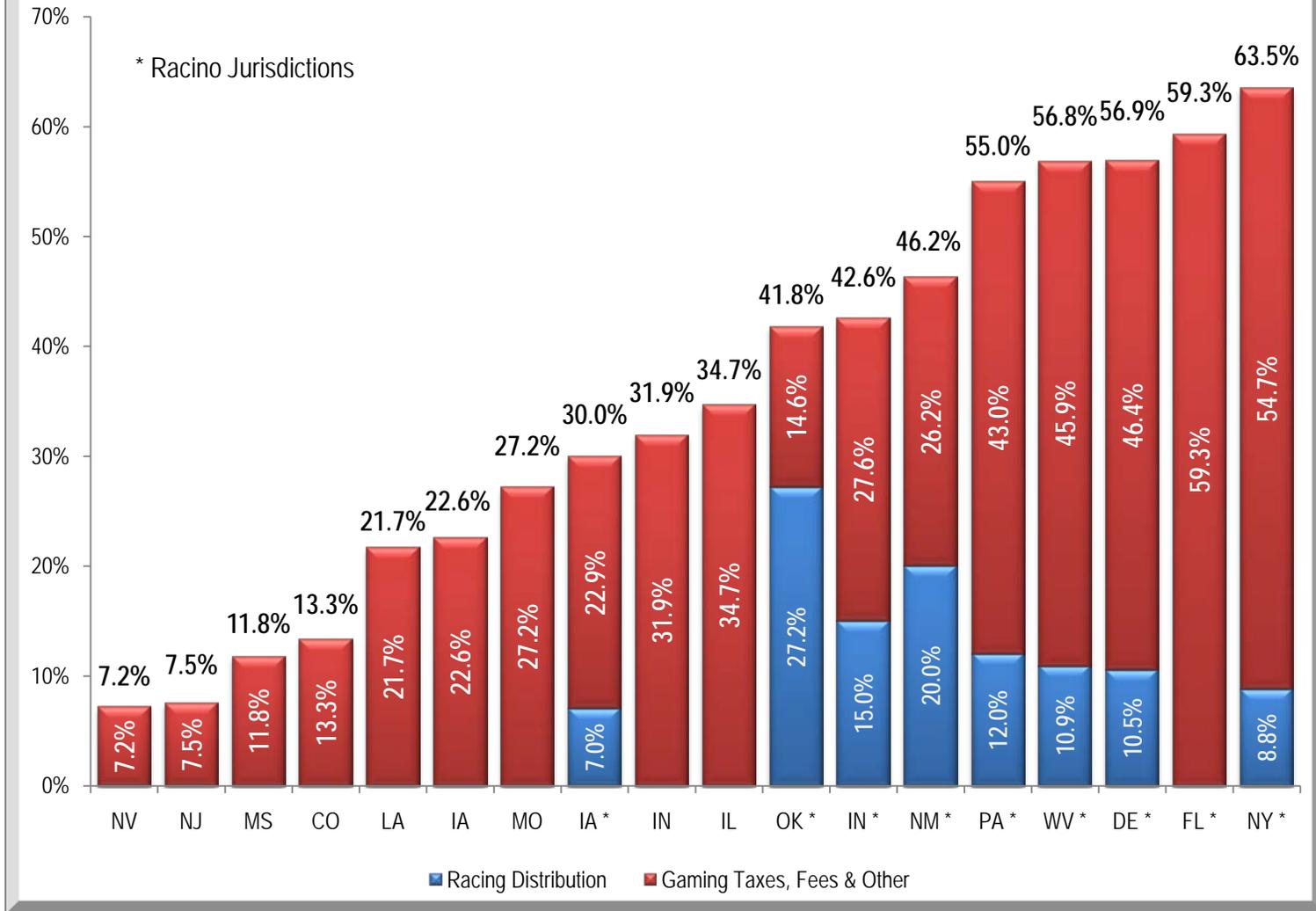
\*\* Reflects the 12 months ended March 2010.

Source: Various Gaming Commissions; The Innovation Group

The following chart shows the total effective tax rate by jurisdiction broken out by racing distribution and gaming taxes and fees.

## Effective Tax Rates by Jurisdiction

(Number above each column represents the total effective tax rate inclusive of racino gaming taxes)



## Graduated Vs. Static Tax Rates

Graduated tax rates can be a useful tool in environments where either by location, market factors or policy decisions there are facilities that have significantly different revenue potential from others. In these situations, a graduated tax structure can provide smaller properties or properties in inferior locations with some relief from higher flat tax rates and therefore the ability to cover fixed costs and compete more effectively.

As noted previously, several jurisdictions including Indiana, Illinois and Colorado have graduated taxes to account for disparate opportunities in the market. In terms of the potential situation in Massachusetts, except for the scenario that includes proposed slots at racetracks, the opportunities among the Destination Resorts from region to region are not such that they would warrant a graduated tax structure in order for one or more of the proposed opportunities to more effectively compete with the others. The presence of slots at racetracks, as demonstrated in the analysis under scenarios four and five, potentially impairs the ability of the Destination Resorts to achieve the forecasted numbers in a situation where the number of slots is not strictly limited. Consequently, in the order to offset the potential impacts so that competitive facilities could, ultimately be developed, a reduced tax rate on the Destination Resorts may need to be considered.

## License Fees and Other Up-Front Requirements

Some jurisdictions have begun to assess one time up-front licensing fees. From an economic perspective these fees are taxes. Typically, the license fee will be amortized over a period of time, as such they represent an additional annual burden on the operator inflated by the interest charged by banks and lending institutions. **The cost to the operator of paying a license fee must be considered in conjunction with the viability of the annual effective tax rate, horseman fees, and other annual operating requirements.**

License fees, typically enacted as a part of the gaming legislation, have come in various forms and amounts. In general though they have fallen into the following categories:

1. A lump sum established through legislation for all licensees;
2. Applied through competitive bidding for licenses;
3. Variable based on size of the project as measured by the number of gaming positions; and
4. Variable as established by legislation related to license type or expected market size.

We will look at the experiences - both good and bad - states have had with each of these various approaches. In many cases the interplay between effective tax rate and license fees is a key determinant of how the industry will react to specific situations and is therefore also a central topic in this analysis.

## Origins and Motivations

Large licensee fees are a relatively new phenomenon in the gaming industry. Originally, license fees were designed to cover licensing costs incurred by the state, and to establish a hurdle to discourage frivolous applications from groups seeking to exploit the inherent value of the license without the wherewithal to actually build and operate a casino. Large and some would say

exorbitant, license fees were first raised in the early debates over the enactment of gaming legislation in Maryland in 2002-2003. Not surprisingly it was anti-gaming groups that raised the issue claiming that the State's were giving away lucrative gaming licenses, and that substantial one time revenues could be raised for the state by either substantially increasing the license fees or putting the licenses up for bid under a defined tax environment. Of course the thrust of those proposing such licenses was in effect to stop the development of gaming entirely. Ultimately, the effect has been to reduce capital investment and hamstring operator's efforts to compete with operators in other states, eventually reducing the benefits to the states in the long run.

Legislators in several states have adopted this approach. Under pressure to meet shortfalls in state budgets, legislators were more than willing to pass enabling legislation that resulted in greatly inflated license fees. The result has been shortsighted and detrimental to the industry, resulting in casinos with minimal capital investment that are unable to compete and generate the ongoing tax revenues originally expected. In several jurisdictions a desire to drive license fees has led to substantial delays, cancelled contracts, and an inability to get financing to move forward.

However, a case can be made that in a managed market (such as being considered for Massachusetts in which there is a limit on the number of casino licenses and therefore a higher degree of certainty as to the revenue stream) license fees are appropriate, and represent the privilege or advantage gained by the licensee that is of value. However, there is a limit to the value of such a privilege and it must be understood that, as outlined above, there are potential repercussions of such fees on the eventual competitiveness of the facilities developed and to the size and stability of long term revenue streams.

### **License Fee as a Tax**

From a business and economic perspective, license fees are nothing more than another way of taxing the industry. Typically, the license fee will be amortized over a period of time, representing an additional annual burden on the operator inflated by the interest charged by banks and lending institutions. The cost to the operator of paying a license fee must also be considered in reference to what value it brings (how profitable are the markets likely to be, and to what extent the market is managed in terms of the number and location of operators) and to the level of the annual effective tax rate. As shown in the table below, sizeable license fees can increase the effective tax rate significantly. In this example, we have assumed a facility generating \$200 million in gaming win and a range of license fees to illustrate how the license fee increases the effective tax rate. We have assumed the license fee would be amortized over 8 years at an 11% interest rate. The table shows that as the license fee increases the effect is to increase the effective tax rate on the operator. It is clear from this that the establishment of a license fee should be considered with regard to the effective tax rate and the ability of the operators to compete in the marketplace.

**Effective Tax Rate for Property Grossing \$200  
Million with Various License Fees**

Gross Revenues	License Fee	Annual Payment*	License Fee Impact on ETR
\$200,000,000	\$50,000,000	(\$9,716,053)	4.9%
\$200,000,000	\$100,000,000	(\$19,432,105)	9.7%
\$200,000,000	\$200,000,000	(\$38,864,211)	19.4%

\*Over 8 Years, 11% interest

### How License Fees Limit Capital Investment and Competiveness

Up-front license fees reduce the amount of capital an operator can access to finance the construction of a new casino property, which ultimately will result in a lower quality asset brought to the market. Given the significant cash outflows for an up-front license payment, operators will strive to open a property as quickly as possible to start generating cash flows that are needed to offset heavy financing costs; this can be accomplished by using pre-fabrication construction materials, which are cheaper and quicker to install than a higher quality building. In addition, these license fees reduce the implied equity value of an existing property owner that may be eligible for a license given the need to come up with incremental capital for the fees; this can make financing more difficult.

License fees generally are being included as part of the overall casino construction and development budgets in new project financing transactions. The license fees cannot be financed separately from the related development, as lenders will require a fully-financed deal to ensure sufficient capital will be available to construct and open the casino, which is the primary source of repayment. As a result, the overall financing for a new casino development with license fees historically, up through the 2007 period, had consisted of equity equal to 15-20% of total project costs and the remainder in non-recourse debt financing up to a maximum total leverage ratio of approximately 5.0x-5.5x (total debt to projected year one EBITDA, or Earnings Before Interest, Taxes, Depreciation and Amortization as discussed in more detail in the EBITDA Earnings section of this report) depending on the market strength. Typically, this new debt financing had maturities of 5-6 years for the senior components if completed in the bank and pro-rata markets and 7-8 years for subordinated components and/or for traditional high yield bond financings.

Like most other industries, the recent economic turmoil has not spared the gaming industry and has also had significant impacts on the financings environment for the industry. The discussion noted above through 2007, has changed. Total leverage ratios have generally been reduced. The maximum non-recourse debt leverage is now in the 4.0x-4.5x range. In addition, equity requirements are now pushing 30% of the project.

Therefore, as an example, if the EBITDA of a project is \$40 million, operators can borrow up to \$180 million (4.5X the EBITDA). If the license fee is \$100 million, the operator has only the ability to borrow \$80 million for construction as opposed to \$180 million in the absence of a license fee. This can make a significant difference in the quality of a development and the amenities it offers. The result will be a reduction in competitiveness and significantly reduced revenues and tax receipts.

Decision makers must therefore account for this when establishing an effective tax rate that will ensure a healthy and thriving gaming industry and the maximization of revenues to the state.

To date, multimillion dollar gaming license fees were levied in Pennsylvania (where an indefinite slot license costs \$50 million) and in Indiana there is a \$250 million license fee. The state of Maryland imposes an initial license fee of \$3,000,000 for every 500 video lottery terminals at the time of the application. The collective price-tag for the land associated with two 30-year resort-casino concessions in Singapore was approximately S\$1.8 billion (USD \$1.19 billion) for properties expected to collectively generate between USD \$2.8 - 3.7 billion per annum. It is important to note that in the case of Singapore, the land was being sold by the government and effectively represented the fee for the concession itself. In return for the investment, the government included a variety of enticements, including a comparatively low 15 percent tax on revenues and assurances that it will allow no additional casinos into the country for at least 10 years.

This *quid pro quo* exchange (up-front fee for right to operate or for the right to operate under specific circumstances) is utilized by governments seeking to generate large and immediate fiscal benefits (with the added benefit of creating barriers to entry, which ensures participation of stronger companies). The same logic can also be manipulated and applied by governments not seeking immediate revenue, but rather to reap some other benefit, such as assisting the tourism industry by encouraging development of the most attractive casino resort facilities. Essentially this is done by calling for a minimum level of capital investment or set of development guidelines in return for the right to operate. Effects can be enhanced by executing such an offer through a competitive RFP process, which in the most desirable markets can result in companies competing to develop projects well above the minimum requirement. This has been successfully accomplished in places such as Chile, Uruguay, and Singapore as well as in several markets in the United States. The State of Maryland is also proposing investment minimums in addition to up-front license fees.

Singapore is an interesting case, its circumstances generated via the estimated \$2.8 - 3.7 billion in annual gaming market potential. As previously discussed, the government was able to solicit investors willing to collectively pay over \$1 billion in up-front fees for 2 individual 30-year operating concessions. Additionally, Singapore has the unique geographical advantage of being perceived as a highly competitive location for the attraction of Asian gaming demand. These opportunities are so attractive that Singapore was able to conduct a highly competitive bid process for their two gaming opportunities. At least 5 investment groups, which included the largest and most established names in global gaming industry, were vying not only to pay the concession fees but pledging upwards of \$3 - \$4 billion in development projects at their sites. Singapore's RFP outlined a small number of technical requirements relating to the possible sites, but presented only the following in terms of an investment guideline for one of the opportunities:

“It will be a world class resort that offers a comprehensive range of recreational and entertainment facilities, including venues for international shows and themed attractions, as well as other amenities such as hotels, spas, fine dining and retail that will provide every visitor with a memorable total leisure experience.

Special attention and efforts should be devoted to the architecture, design and landscaping of the IR [integrated resort] development such that it occupies a pre-eminent position among the most attractive tropical resorts in the world. The overall design should be sensitive to the local context of the site, specifically the tropical island nature of Sentosa and the marine/coastal frontage of the site.”

Contrasting the abstract investment guidance presented in the Singapore RFP, the U.S. State of Maryland specifically requested that license applicant invests \$25,000,000 in construction and related costs for each 500 video lottery terminals included in the applicant’s bid.

## Case Studies – Well Received

### Singapore

In December 2004, the Government of Singapore invited industry players to submit concept proposals for integrated casino resorts within the country. A total of 19 bids were submitted during this process. As a result, Singapore ended its ban on casino gambling in April 2005 and announced plans for one casino resort in Marina Bay and one in Sentosa.

A Request for Proposals (“RFP”) was launched for the Marina Bay site in mid-November 2005. The proposal process was closed by the end of March 2006 and a selection was made from four applicants in May 2006. The winning bid was from Las Vegas Sands, whose facility opened in the Spring of 2010.

The RFP for Singapore's second casino was launched in April 2006 and closed in October of that year. Four proposals were being prepared, but only three were submitted. Genting International and Star Cruises won the bid in December 2006 (Genting has since purchased Star Cruises’ share). The facility opened early in 2010. The second RFP was closed five months after the first RFP was awarded so that those who were not successful in the first application could participate in the second RFP.

Marina Bay applicants were to submit refundable deposit of S\$60 million (\$43 million) with their proposal package and the successful applicant was responsible for paying a “Land Premium” of S\$1.2 billion (\$866 million). The Marina Bay Request for Proposals (“RFP”) was administered by the Singapore Tourism Board and included the following criteria for evaluation:

- 40% on tourism appeal and contribution. This included developing an iconic facility inclusive of amenities that would drive incremental tourism.
- 30% on architectural design and concept excellence, inclusive of how the facility was integrated into its surroundings.
- 20% on the level of development investment committed.
- 10% on the strength of the consortium and partners including the strength of the financial plan and the commitment of the shareholders.

The government envisioned the location to be best suited towards the development of the meetings and conventions market and chose Las Vegas Sands as the developer.

Sentosa applicants had a deposit of S\$30 million (\$21.6 million) and a “Land Premium” of S\$605 million (\$436 million). The Sentosa RFP included the following criteria on which applicants were evaluated:

- 45% on tourism appeal and contribution. This included developing an iconic facility inclusive of amenities that would drive incremental tourism.
- 25% on architectural design and concept excellence, inclusive of how the facility was integrated into its surroundings.
- 20% on the level of development investment committed.
- 10% on the strength of the consortium and partners including the strength of the financial plan and the commitment of the shareholders.

The vision for the Sentosa location, along the coastline and on an island, was for a leisure and family-based entertainment facility. Genting was ultimately chosen to develop the facility.

The government and the applicants were satisfied with the process, which reportedly was rational and efficient. While revenue figures are not yet available, based on visitation numbers, press releases, and interviews, the casinos appear to be performing well.

## Pennsylvania

The Pennsylvania license process for existing facilities was largely undertaken between 2005 and 2006. Category 1 licenses applied to race tracks and Category 2 to stand-alone slot casinos. Category 2 licenses were awarded on a competitive basis. Licenses allowed 3,000 slot machines initially, rising to a maximum of 5,000 slot machines. The Commonwealth dictated that the initial licensing fee would be \$50 million with taxes and revenue sharing adding up approximately 52% of revenue once all facilities were opened. Revenue was earmarked for property tax relief, economic development and infrastructure improvements, local governments, and to support the horse racing industry.

Overall 14 licenses were available. Seven Category 1 licenses, available for race tracks; seven Category 3 license available for stand-alone slot casinos; and two Category 3 licenses that were limited to existing resorts with a maximum number of slot machines limited to 500. To date, a total of six Category 1 facilities have opened. The seventh license was anticipated for Western PA but to date has not been awarded.

Five Category 2 licenses were available through a bidding process in which applicants needed to provide details on their proposed locations, projected revenue, and impacts on the surrounding community. At the time, strong economic growth and easy access to credit fueled interest, and many applications were received. For the most part, the licensing process was relatively efficient. A facility was approved for Bethlehem, and while the building plan was scaled back from its original scope, the facility was completed and has opened. A license for Pittsburgh was awarded to Don Barden’s Majestic Star; however during construction of the facility the credit markets tightened, and an outside partner, Midwest Gaming, was awarded approval to complete and open the property. Two facilities were approved in Philadelphia but have met staunch local resistance and have been delayed. A riverfront casino is finally under development by Sugar House with a scheduled opening for late summer/early fall of 2010. The second Philadelphia

facility has yet to commence construction; it appears likely that financing issues by the current license holder Foxwoods will force the revocation of the license. At this time it is speculated that it will be re-bid on by interested operators.

Overall, the license fees and tax structure in Pennsylvania, while relatively high did not deter a number of operators from submitting bids. The recession and collapse of the credit market have had an impact on those operations causing profit margins to decline.

## Ohio

Ohio voters have approved land based casinos under the “Ohio Jobs and Growth Plan,” which allows specific locations in Cleveland, Columbus, Cincinnati and Toledo to develop casinos offering up to 100 table games and 5,000 slot machines. The Columbus location has been subsequently changed to an alternative site as a result of local opposition and was approved by election in May of 2010. The four casinos are to have a gaming tax rate of 33%. In addition, a minimum investment of \$250 million is required, along with an up-front fee of \$50 million.

Given the large market potential of these locations and the competitive tax rate, the license fee is anticipated to be reasonable. It is likely to ensure competitive facilities and will likely cause surrounding states, particularly West Virginia, to look at their tax structure.

However, if Ohio racetracks are permitted to install video lottery terminals, it could put pressure on the land based casinos to reduce investment. Ohio’s seven racetracks had been given permission by the legislature to install up to 2,500 Video Lottery Terminals (VLTs). A minimum investment of \$80 million would have been required, with a gaming tax of 50% and an up-front fee of \$65 million. However, those developments are in doubt after the Ohio Supreme Court ruled that the measure must be approved by referendum. Recent efforts to craft legislation to regulate the casinos also resulted in discussions to allow tracks to operate slots, paying a 50 percent tax to the state, with the rate dropping to 33 percent once casinos open and a \$50 million license fee. Nothing has yet come of this. There is also the possibility that racinos at Ohio’s racetracks will make it onto the ballot for this November further complicating the Ohio situation. This situation continues in flux as the regulatory issues surrounding the casino plays out in the state capitol and in effected communities around the state.

If this effort is successful it may call into questions the ability of casino operators to raise the required license fees and investment in an environment of intensified competition.

A key lesson from the Ohio experience is that a unified approach to gaming, casino and racinos, will likely result in the most rational and beneficial development of the industry.

## Case Studies – Questionable Results

### Maryland

Maryland passed legislation enabling slot machines at limited track and off-site locations, with a proposed tax rate of 67% with high licensing fees burdens. As a result the state received six proposals for five locations. Two of the bids were immediately discarded since they did not include the application fee, leaving only four for consideration. One of these, in Baltimore, was

subsequently denied a license since it had submitted a license fee for the minimum number of machines (500) yet had proposed a facility of 3,750 machines. That winning bid was subsequently rejected when the developer failed to provide the additional required license fee. One reason the application fees were not paid, according to some experts, was that the legislation did not clarify whether the fees would be refunded if the proposal was not accepted.

The Cordish Company proposed 4,750 machines to be located adjacent to the Arundel Mills Mall in Anne Arundel County. A competing bid from Magna Entertainment that suggested 4,750 machines for the nearby Laurel Racetrack did not include an application fee and was therefore discarded. Another bid, for 3,750 machines in Baltimore, only included the application fee for 500 machines. Penn National which applied for the Cecil County license had initially considered bidding for only 500 machines subsequently, after pressure from elected officials, this was increased to 1,500.

The only other bid was for a modest 800 machines in Worcester County. In Allegany County, there were no qualified bids.

Maryland’s initial license fee varied at a minimum rate of \$3 million per 500 VLTs. The number of VLTs permitted for each county is outlined in legislation.

<b>Maryland Operator License Fees</b>			
County/City	Units Bid	Operator	License Fee
Ann Arundel County	4,750	Cordish Cos. Pending zoning approval (expected by Dec 17)	\$28.5 million
Baltimore City	3,750	Baltimore City Entertainment Group Pending submission of remainder of licensing fee (\$19.5 million) and revised plans	\$22.5 million*
Cecile County	1,500	Penn National Gaming	\$9.0 million
Worchester County	800	Ocean Enterprises, LLC	\$4.8 million
Allegany County	1,500	No qualified bidders	\$9.0 million

Source: Maryland Lottery. Note: \* Only \$3 million has been paid.

## **Kansas**

The Kansas Expanded Lottery Act (Senate Bill 66) was passed during the 2007 session of the Kansas Legislature, allowing one casino facility in each of four gaming zones in Kansas. Entities granted a gaming license are required to pay a \$25 million "privilege fee" (\$5.5 million for the southwest gaming zone). Additionally, a capital investment of at least \$225 million (\$50 million for the southwest gaming zone) was required.

High taxes, license fees and minimum capital investments have limited feasibility. Penn National Gaming, Inc., Sumner Gaming Joint Venture (Harrah’s), Kansas Entertainment, LLC (Hard Rock) each withdrew approved applications in late 2008 citing the impact of the economy and inability to commit to capital investments stated in the contracts. Reciprocal interest in the development process has been low, extending an already lengthy process. Though new

applications were received and approved for the South Central and Northeast zones, the most recent deadline for the South East Gaming Zone was extended through July 15<sup>th</sup> 2010, due to lack of interest.

In April 2010, the Chisholm Creek Resort project slated for Mulvane in the South Central Gaming Zone (Sumner County) pulled out of the development process after being selected. The development team was looking for a time extension to work out zoning issues, to await the outcome of legislation associated with racino tax rates and to further understand the potential for a Native American facility in Park City. Subsequently, the Lottery Commission approved re-opening bids in the South Central Zone with a new deadline of July 22, 2010.

Note that the Kansas Legislature did not act on the gaming law rework legislation that would adjusted the minimum capital investment requirement for the Southeast Gaming Zone and lowered the effective tax rate for racino operations.

The following summarizes the current status of gaming in each development zone and for racetracks generally.

**Southwest Zone:** The Boot Hill Casino and Resort opened in December 2009. The operation is paying taxes at a rate of 27% of gaming revenue:

**Northeast Zone:** The gaming facility proposed for this zone is currently under construction in Wyandotte County near the Kansas Speedway. This project is 50% owned by the Kansas Speedway and 50% owned by Penn National Gaming. The development budget for Phase I was set at \$361 million.

**Southeast Zone:** No viable applications for this zone have been received to date. The Lottery Commission continues extend the deadline for applications (currently July 15<sup>th</sup> 2010). We do not anticipate any viable applications unless the minimum capital requirement is reduced from the current level of \$225 million.

**South Central Zone:** As discussed, the Lottery Commission recently re-opened the application process for this zone, after the approved applicant pulled out of the development process. We anticipate future applications as a viable market exists. Again, a lower minimum capital investment requirement would foster new applications, as the current requirement is on the cusp of being prohibitive, especially in light of any uncertainties with regard to competition.

**Racetracks:** There are no racetracks currently operating in Kansas. The Woodlands in Wyandotte County closed in August 2008 and Wichita Greyhound Park closed in December 2008. We do not anticipate the implementation of slot machines at racetracks as the racino tax structure (discussed earlier) is prohibitive. In the 2010 legislative session, the Kansas Legislature failed to pass a bill that would have change the tax structure for racetrack casinos.

### **New York (Aqueduct)**

While Yonkers has been open since 2006, the awarding of the Aqueduct license, which would allow the operation of 4,500 video lottery terminals, has been delayed by financial problems at

the NYRA (New York Racing Association), court battles, political battles, and the sudden political demise of former Governor Eliot Spitzer. And just when it appeared in October 2008 that the saga was over, the souring economy prevented winning bidder Delaware North from being able to make its \$370 million up-front payment. Governor Paterson refused in March 2009 to grant an extension to Delaware North, and therefore the bidding was re-opened.

For the re-bid, Delaware North was joined by six other bidders, all of which are major operators as shown in the table below.

#### **Aqueduct Bidders**

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Delaware North
Wynn Resorts
MGM Mirage
Harrah's Entertainment
Penn National Gaming
Seminole Indian Tribe Operated Hard Rock
Aqueduct Entertainment Group *

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\* Aqueduct Entertainment is comprised of The Navegante Group as gaming partners, The Clairvest Group, as well as local developers.

However, in early November Gov. Paterson arbitrarily established a minimum license fee of \$200 million, payable within 30 days, and further required that the bidders provide proof of their ability to make the payment. This \$200 million requirement prompted Wynn Resorts to withdraw its bid on November 4, 2009. Hard Rock, with partner SL Green Realty, has raised its overall bid from \$275 million to \$300 million. Aqueduct Entertainment Group also committed to a \$300 million licensing fee.

After a lengthy vetting process, Governor Patterson selected the Aqueduct Entertainment Group (AEG) to operate the casino. Rumors started to circulate shortly after that AEG received the license due to its perceived political connections. An investigation was launched by the prominent members of the New York State Senate. The outcome of that investigation was never reached, as NYRA rejected the license for AEG to operate the casino at Aqueduct.

Following that most recent setback, the bidding and selection process was re-opened. The new selection process will be based on a points system. Of 100 total points, 90 will come from a proposal breaking down the economic impact, number of projected jobs, and security. The other 10 points will be awarded based on how much up-front money the bidder is offering. The licensee must give New York State \$300 million. Each proposal must provide for a new 10,000-square-foot entry lobby at the track site; a new 20,000-square-foot porte cochere with six lanes of traffic at the entrance; a parking structure with at least 2,000 parking spots; and a covered walkway connecting the Aqueduct subway station to the VLT facility. The request for proposals also requires the site to equal or exceed two similar racinos in the state: Empire City in Yonkers and Saratoga. Governor Patterson is expected to make a decision by August 2010.

The experience with Aqueduct demonstrates that exorbitant bid expectations can delay the licensing process and reduce the level of competition. This can be counterproductive to the goal of enhancing state revenues.

### **Illinois 10<sup>th</sup> license**

Illinois' ten licenses were originally awarded without significant problems. However, when the Galena casino in Northwestern Illinois failed because of a small market and competition in Dubuque, Iowa, the tenth license became available. The enabling legislation was rewritten to allow the license to be moved to the Chicago area, and Emerald Casino, Inc. proposed to move it to Rosemont.

However, the Illinois Gaming Board ("IGB") revoked Emerald's license due to alleged improprieties and put the license up for bid in 2001. Initially the bidding process appeared successful, generating a \$615 million bid by MGM-Mirage. However, the Illinois legislature implemented a large gaming tax increase, and in response MGM-Mirage backed out of its offer.

In 2004 the IGB awarded the license to the Isle of Capri for \$518 million, although the IGB staff recommended a competing bid by Midwest Gaming in nearby Des Plaines for \$476 million. The Isle of Capri award was later revoked by the IGB after the involvement of Illinois Attorney General Lisa Madigan and allegations of improprieties.

Finally, after years of court battles and yet another bidding process, Neil Bluhm's Midwest Gaming & Entertainment LLC was awarded the license in December 2008 for a bid of \$100 million, even though other bids ran as high as \$435 million.

The open bidding process led to a seven year delay in awarding the license to only arrive at a significantly lower licensing fee. The potential operating income and taxable revenues during that timeframe were also lost.

## ***Reviewing the Market Outcomes of Policy Choices: A Case Study Approach***

Through the presentation of selected jurisdictional experiences, this section will further explore the intent of the policy as it relates to actual outcomes in a variety of market contexts. The goal of this section is not to present an exhaustive list of outcomes, but rather to highlight and develop a set of themes we believe are relevant to the design of enabling policies (such that would encourage Massachusetts to achieve stated objectives).

### **Effects of an Excessive and/or Unstable Tax Rate**

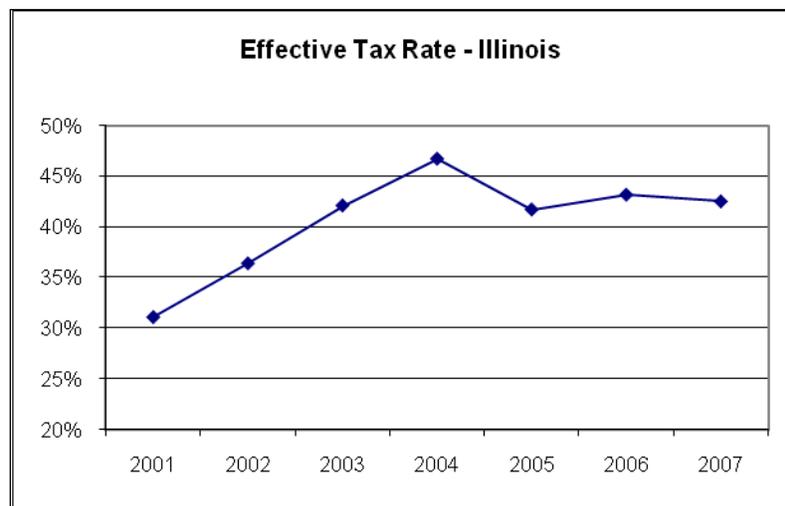
Today's gamers have come to expect significant scope and quality, including numerous food and beverage and amenity options, as part of an overall entertainment experience. If the effective gaming tax rate is set at an equitable level in Massachusetts, ultimately the gaming facilities will be competitive in the regional and national level and gaming revenues (and inherently gaming taxes), will be maximized. In terms of job creation, and all other things being equal, lower tax rates will provide an operator with more cash flow for marketing activities, providing superior

customer service, and including more amenities in the building plan. All of these activities will lead to increased job creation.

The Innovation Group identified several examples where an unreasonable and unstable tax rate structure negatively affected the gaming industry in a particular jurisdiction. The negative consequences included reduced economic expansion, a decline in gaming revenue, a loss of jobs, and a reduction in the quality of the gaming product. The classic example relates to the tax rate environment in Illinois over the last several years. In addition, hard lessons were learned in Louisiana, New York, Florida, Maryland, and The United Kingdom.

## Illinois

The Illinois legislature raised the gaming tax rates associated with the graduated tax schedule in June 2002 and again in June 2003. The 2002 change increased the effective tax rate in Illinois by about 7%, while the 2003 change further raised the effective rate by 8%. Adding to the already unstable tax environment, Governor Blagojevich began espousing a possible state takeover of the gaming industry. In June of 2005, the rates were rolled back to the June 2002 increase. The following graph highlights the effective tax rate volatility in Illinois over the last several years:



The net result of the unstable tax environment and the higher effective rate was an industry reaction, in an attempt to salvage profits, which curtailed economic expansion. The ensuing lack of capital expenditures, hiring, and marketing led to lower gaming revenue and negatively affected the quality of the gaming product for consumers.

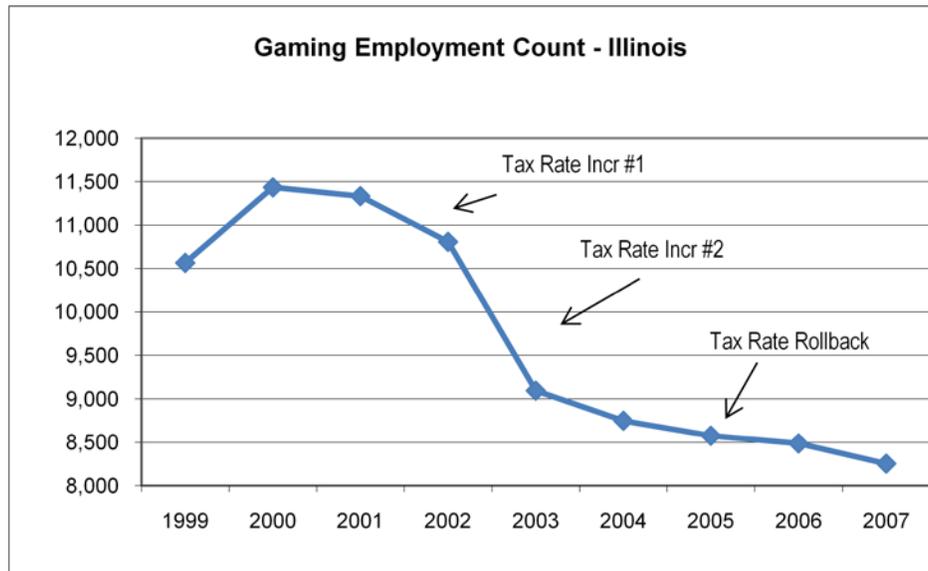
## Impact on Economic Expansion

One of the best measures of economic expansion associated with a particular industry is employment. Direct employment in the gaming industry in Illinois peaked in 2000 at 11,434 employees, remaining steady at 11,333 through 2001. In 2002, the year of the first tax rate increase, employment declined 5% to 10,808 employees. The following year, in reaction to the second and the largest of the tax rate increases, employment dropped 16% to 9,094 employees. Employment continued to decline in 2004 as the full year effect of the June 2003 tax increase

was realized. Employment stabilized somewhat following the tax rate rollback, which took effect in 2005, only to regain negative momentum in 2007. Compared to the peak in employment, 2,686 jobs were lost reflecting approximately \$67 million in salaries. The following table and graph display the employment count data associated with the gaming industry in Illinois during the period of tax rate volatility:

Year	Employees	% Change
1999	10,566	
2000	11,434	8.20%
2001	11,333	-0.90%
2002	10,808	-4.60%
2003	9,094	-15.90%
2004	8,748	-3.80%
2005	8,575	-2.00%
2006	8,486	-1.00%
2007	8,253	-2.70%

Source: Illinois Gaming Board



In addition to the decline in employment, there were other indications that economic expansion was curtailed. Various casino operators cited plans to delay or cancel casino expansion projects. MGM tabled plans to invest about \$500 million in a new casino. Harrah's postponed a planned expansion at their Metropolis property. Argosy decided to scale back a previously announced barge expansion. The Casino Queen noted that their expansion would be in jeopardy if not for the tax rollback. Finally, one of the Illinois Representatives that supported the tax rollback did so to induce investment, according to the St. Louis Post Dispatch. In summary, the tax rate increases in Illinois adversely affected economic expansion.

## Decline in Gaming Revenue

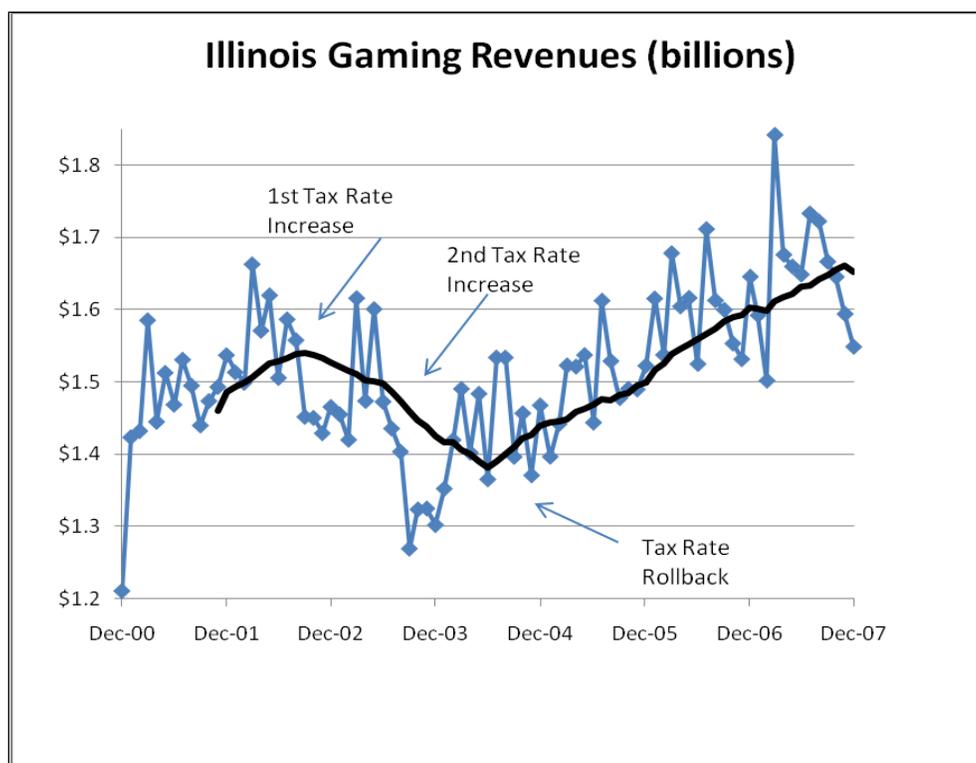
The most notable impact of the tax rate increases was the decline in Illinois gaming revenue,

which is primarily attributable to the reaction of the casino operators to implement policies to maintain profit margins. The casino operators reduced allocations for marketing and promotional items, mainly related to giveaways. Additional operating changes included reducing operating hours, charging admission fees and cutting back on customer service elements. The casino operators targeted remaining marketing efforts towards the high-end gaming segment. The strategy made sense considering the restriction on the number of slot machines associated with gaming in Illinois and the need to meet debt obligations.

The casinos in Illinois posted gaming revenue in 2000 of \$1.658 billion, a strong 22% increase over the prior year. The gaming revenue growth rate moderated somewhat in 2001 to 8%. Gaming revenue peaked at \$1.832 billion in 2002, a modest 3% increase over the prior year as only the second half of the calendar year 2002 was impacted by the first rate increase. The second rate increase in June 2003 had the more profound impact, as gaming revenue fell 6.6%, the first year-over-year decline in gaming revenue since the inception of gaming in Illinois. Gaming revenue in 2004 was relatively flat at \$1.718 billion. Following the rate rollback, gaming revenue increased 4.7% to \$1.799 billion in 2005, then 6.9% to \$1.924 billion in 2006, and again in 2007 to \$1.983 billion (a gain of just over 3% over the previous year). The following chart shows annual gaming revenue for the Illinois casinos over the last several years:

<b>Illinois Gaming Revenue</b>		
	<b>Gaming Revenue</b>	<b>% Change</b>
	<b>(\$ millions)</b>	
1999	1,363	
2000	1,658	21.60%
2001	1,784	7.60%
2002	1,832	2.70%
2003	1,710	-6.60%
2004	1,718	0.50%
2005	1,799	4.70%
2006	1,924	6.92%
2007	1,983	3.09%

Source: Illinois Gaming Board



Illinois gaming admissions were even more severely impacted by the tax rate increases as gaming operators target marketing efforts towards the high-end gamer segment. In 2002, the casinos posted 18.2 million admissions statewide, roughly flat in comparison to the prior year. The 2003 admissions dropped sharply, decreasing 12% in response to the second tax rate increase. The poor admission results continued in 2004 falling to 15.3 million, an 8% decline in comparison to the prior year. The situation has reversed as gaming admissions were flat in 2005, and posted moderate growth in both 2006 and 2007. The following chart displays Illinois gaming admissions over the last six years:

### Illinois Gaming Admissions

Year	Gaming Admissions	% Change
1999	21,992,000	
2000	19,015,000	-13.50%
2001	18,808,000	-1.10%
2002	18,822,000	0.10%
2003	16,598,000	-11.80%
2004	15,331,000	-7.60%
2005	15,323,166	-0.10%
2006	16,180,360	5.60%
2007	16,525,437	2.10%

Source: Illinois Gaming Board

It is important to compare the Illinois statistics to neighboring states in order to rule out on overall industry decline. Prior to June 2002 the gaming revenue growth rates in Illinois and Missouri were similar. There was a clear divergence beginning in June of 2002, the date of the

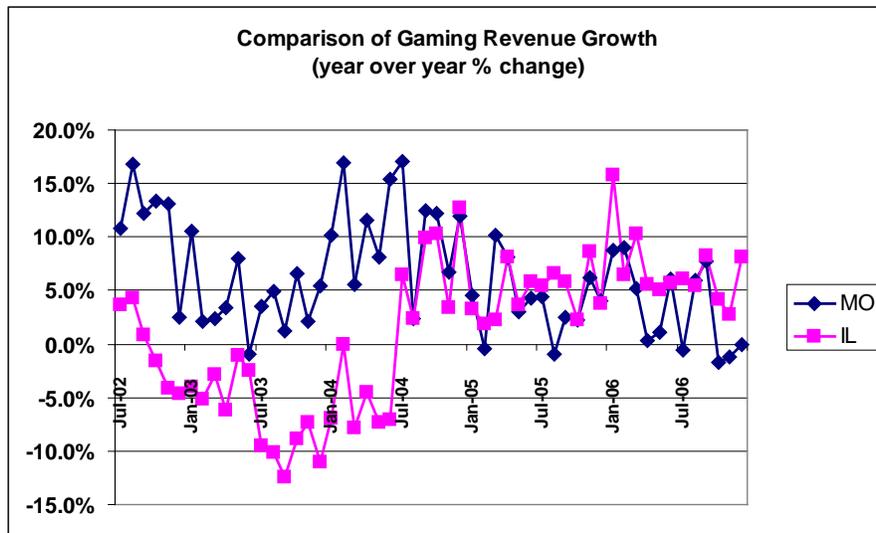
first Illinois rate increase. For fiscal year 2003 (July 2002 through June 2003) the spread between Missouri's gaming revenue growth rate and that of Illinois was nearly eleven percentage points. For fiscal year 2004, the disparity in growth rates was similar. Following the one-year anniversary of the second tax rate increase, growth rates between Missouri and Illinois were again comparable. The following chart and graph highlight the disparity in growth between Missouri and Illinois:

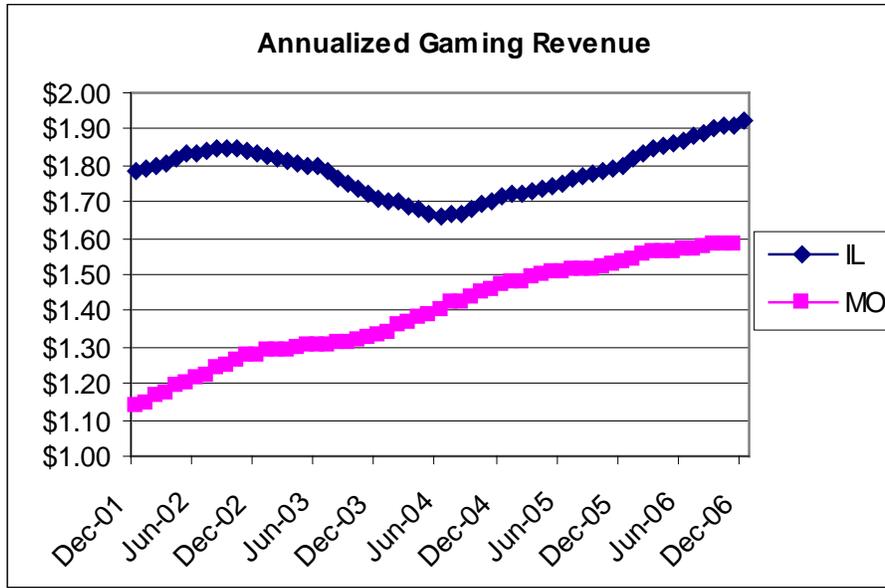
**Gaming Revenue Growth Rate**

Fiscal Year	Illinois	Missouri	Spread
FY 2002	2.67%	12.42%	9.75%
FY 2003	-6.63%	4.07%	10.70%
FY 2004	1.03%	10.72%	9.69%
FY 2005	4.13%	4.00%	0.13%
FY 2006	6.93%	3.93%	2.99%
FY 2007	3.11%	-0.04%	3.15%

Source: Illinois Gaming Board; Missouri Gaming Commission

The following graph compares the monthly gaming revenue growth rates for Illinois and Missouri. Note that the gap appears immediately after the first rate increase and lasted for two years exactly. This supports our contention the decline in gaming revenue was the result of the tax increase and not typical market forces.





### Decline in Quality of Gaming Product

An additional consequence of an unreasonable and unstable tax rate structure is the decline in the quality of the gaming product. As gaming margins tighten, the natural reaction of the gaming operators is to cut back on notable customer service elements, such as free admission, longer hours of operation in the casino and restaurants, and free soda on the casino floor. In addition, the level of promotions, especially in the area of giveaways, will generally be curtailed. Finally, the lack of capital investment means the facilities age as annual capital infusions are reduced and no new games or amenities are forthcoming. With the high traffic experienced at facilities, furniture, flooring, and the overall environment quickly deteriorates, diminishing the customer experience and contributing to the challenges.

This was evident in Illinois following the second tax rate increase in June 2003. For instance, according to an August 1, 2003 article in the Chicago Sun-Times, Harrah's Joliet sent letters to gaming customers citing an upcoming admissions charge. The article also noted that Harrah's discontinued its breakfast buffet and hotel room service and curtailed other food and beverage offerings. The Harrah's general manager noted that the changes were the result of the high tax environment. Hollywood Casino also announced its intention to charge for admission, parking, and soft drinks, all complimentary in the past. Finally, several casinos petitioned the Illinois Gaming Board to allow for shorter hours of operation.

### New York and Florida

The cases of New York and Florida offer evidence as to how excessive taxation in a gaming jurisdiction that geographically competes with a low or no-tax jurisdiction can equate to reduced competitiveness in the high-tax jurisdiction.

## New York

The State of New York had initially chosen a path which significantly limited the positive impact of gaming to the state by allowing operators to retain approximately 20% of gaming revenue. This revenue split created a problem for the operators in terms of justifying the capital investment needed to develop competitive facilities. The low level of revenues retained by operators under this arrangement also made it difficult to market the properties with promotions and giveaways and thus establish a customer base willing to make repeat visits. Without the ability to effectively communicate with customers and provide incentives to patrons, racinos in New York were unable to compete with the surrounding Native American casinos within the state and the gaming facilities in Pennsylvania.

In an attempt to reignite the positive impact of gaming, New York lawmakers went back to the drawing board to revamp the tax structure. Under the new structure, the racetracks would keep 32% of the first \$50 million in VLT revenue, 29% on the next \$100 million, and 26% on gaming revenue greater than \$150 million. In addition, the legislation provides for a “marketing and promotional” payment to racetracks for 8% on the first \$100 million in VLT revenue and 5% on revenue greater than \$100 million. It should be noted that out of the amount the tracks retain approximately a third goes to the horsemen.

This relief was not sufficient to ensure the financial health of some of the smaller tracks in upstate New York, which compete directly with Native American casinos that are share revenue at a much lower rate. Some of these tracks have been on the verge of bankruptcy. This brought about the passage of bill S3830 in February of 2008 (effective April of 2008). The purpose of S3830 was to increase the VLT vendor fee under certain limited conditions, thereby allow racetrack to keep more funds. These revisions include:

- For VLT vendors with less than 1,100 machines, the rate would increase from 32% to 36% for the first \$50 million received in revenue by such facility.
- For VLT vendors with more than 1,100 machines, the rate would remain at 32% for the first \$50 million received in revenue by such facility.
- For VLT vendors located in an area with a population of less than one million people within a 40-mile radius, the rate would be 40% for the first \$50 million annually.
- For VLT vendors located within 15 miles of an Indian Casino, the rate would be 42% for the first \$50 million in revenue received for the first five years of operations and then decrease to 40%.
- Should an Indian casino be located within 15 miles of a VLT vendor after the effective date of this act, the vendor fee would increase to 42% for the first five years and then be reduced to 40%.
- VLT vendors became eligible for an additional fee of up to 4% of first \$62.5 million of VLT revenue to be used exclusively for capital investments that enhance the VLT facility, such as hotels, dining, entertainment, and retail facilities, or other improvements

that enhance facility amenities. Such capital expenditures must be approved by the Division of the Lottery, in consultation with the Racing and Wagering Board. Such capital investment revenue shall be limited to an annual amount of \$2.5 million and an aggregate amount of \$20 million over the period of eight years per gaming facility. This provision expires in eight years after it becomes law. In addition, the marketing fee would increase from 8% to 10% for the first \$100 million and then be reduced to 8% for monies collected thereafter. Further, the marketing fee for Aqueduct and Yonkers increased from 4% to 8%.

The bill benefitted all tracks but especially the smaller tracks in upstate New York such as Tioga Downs, Vernon Downs, Batavia, and the Fairgrounds in Buffalo.

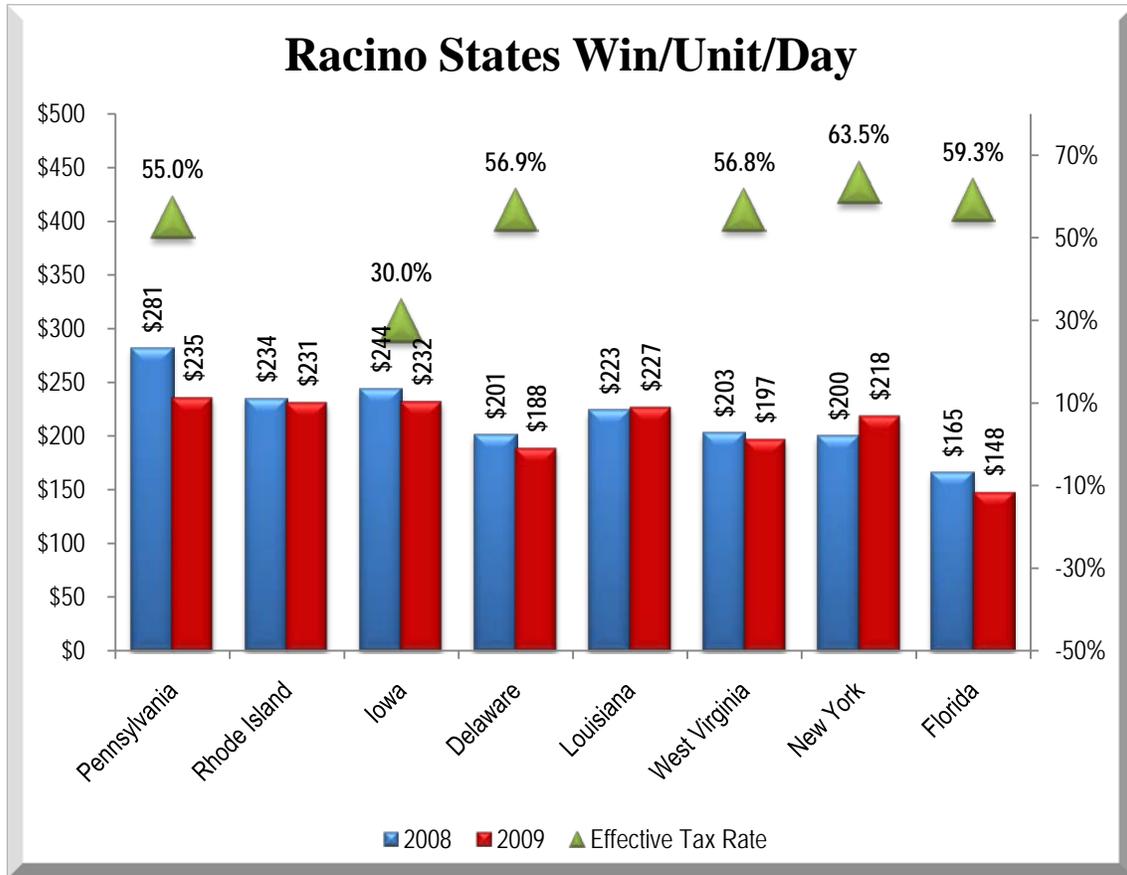
The saga in New York is illuminating and shows how long and difficult it can be to get the correct balance of taxes, capital investment, and revenue generation that are most likely to maximize benefits to the state. As the state continued to attempt to retain the majority of revenue, it continued to adjust legislation to give operators the tools they needed to operate. From the operator's perspective, however, the legislation continues to be onerous. Industry experts agree that revenue levels are not optimal, and that allowing operators to leverage their experience through lower taxes would lead to higher revenue for operators and the state.

As noted previously VLT operations in New York were generating very low returns, as measured by win per unit per day<sup>3</sup>, in comparison to other racino jurisdictions. One of the arguments regarding New York, which is supported by The Innovation Group, is that because of the high tax rates, operators have not invested heavily in their facilities or customer development. As a result, many of these facilities do not offer competitive products compared to other regional choices like casinos in Connecticut or Atlantic City. However, win per unit per day for New York in CY 2009 approximated \$218, \$18 more than the previous year and on par with the simple average for other racinos of about \$219. This increase is due in part to the lower tax rate in New York, which dropped from nearly 70% to approximately 63.5%, as well as in part to the ramp-up period expected with new facilities as the market matures.

Revisions to the effective tax rate in other states may have coincided with statewide performance increases on a per unit basis in 2009, however due to the declining economy, most racino states save New York and Louisiana showed declining win/unit/day. The following graphs display win per unit per day for the major racino jurisdictions for CY 2008 and CY 2009:

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<sup>3</sup> *Win per unit per day* is an important industry metric used to gauge the relative performance of gaming machines. The calculation is made as follows: Gaming revenue held by the casino after all winnings are paid out (often referred to as Gross Gaming Revenue) is first divided by the average number of gaming machines over the analysis period and then by the number of operating days in the analysis period. The metric reflects the average amount of gross gaming revenue generated by each machine for each day it operates; and, thus illustrates the comparative revenue generating efficiency of the unique sets of machines being analyzed.



## Florida

Florida provides another example of how a high tax rate can reduce the competitive effectiveness of a gaming operation. In Florida, the state tax rate is 50% in addition to a 3% distribution to local government, with the tracks negotiating a share for purses from the remaining 50%. At first glance, win per position performance has been lower than would be expected for this market, as seen in the table below.

<b>Florida Racinos Win/Position/Day</b>		
Property	2008	2009
Pompano (ISLE)	\$209	\$183
Mardi Gras	\$149	\$120
Gulfstream (MECA)	\$138	\$140

Source: State of Florida

The cause of this poor performance in Broward lies with competition from the nearby Seminole Indian's Hard Rock Casino in Hollywood, Florida. Initially the Seminoles with a Class II casino facility paid no taxes or revenue sharing and as a result had been able to not only develop an attractive facility, but also had been able to out-compete the racinos through promotions and marketing efforts that the racinos, because of their tax burden, were unable to match. The racinos have no significant advantages in terms of proximity to the gamer population that would

potentially offset the Seminoles' advantages. Since the racinos were introduced, the state executive and legislature has undertaken a long process of trying to negotiate a compact with the Seminoles and providing revised tax structures for the racinos.

## Louisiana

Louisiana provides an example of a situation where the requirement of an up-front fee combined with high gaming taxes contributed to a severe negative impact on the industry. The land-based casino in New Orleans was required to pay a minimum of \$100 million in state taxes annually, and riverboats an effective tax rate of about 21.2% on gaming revenues. Local taxes for riverboats elevate the effective rate by approximately 5%. In 1995 two new riverboat casinos opened in New Orleans. They both closed within nine weeks. The City of New Orleans was left to fight with other creditors over collecting \$3 million in taxes and fees.

In 1995, the temporary land-based casino had netted only about one-third of its projected revenue. The closing of the land-based casino led to the layoff of roughly 1,000 city workers and a 5% cut in the city budget. Both of these failures were directly related to high tax rates. The land-based casino eventually reopened at a new location with the help of reorganization under bankruptcy protection that led to an agreement to drop the minimum annual tax payment from \$100 to \$50 million. Nonetheless, the casino has downsized significantly and consequently has not generated the additional capital investment originally anticipated or the projected level of tax revenue. By the time the casino reopened, competition from the Mississippi Gulf Coast and riverboat casinos elsewhere in New Orleans and around the state had transformed the competitive environment to one of high intensity. Difficulties created by this level of competition are compounded by the lack of profitability, which in turn reduced the ability to budget sufficient marketing expenditures, leading to reduced revenue potential. It is only recently with the removal of certain restrictions on the addition of a hotel and restaurants associated with the casino that the property has turned the corner in terms of profitability.

Louisiana is also known for strict controls on slots, which often delay the latest machines from getting to the casino floor. This gave nearby casino markets, most notably Mississippi, a significant advantage for the lucrative core market for slot players.

The Innovation Group believes that the tax rate was too high in relation to the competitive and regulatory environment in Louisiana, leading to decreased profitability and an industry that lacked financial viability going forward.

## Maryland

The recent experience in the State of Maryland provides insights into the typical outcome of policies which produce excessive taxation, a restrictive regulatory environment, an unstable tax or regulatory environment, or some combination thereof. Maryland recently enacted gaming and the experience there is particularly useful in demonstrating the impact of policy on the ability of a jurisdiction to attract the desired level of capital investment in its gaming industry.

This example offers a cautionary tale to governments considering gaming legalization: Ignoring the basic economic needs of industry stakeholders increases the probability that benefits to the

state (in whatever form they are being sought) could as best remain marginal, and may go completely unrealized.

In November 2007, Maryland officials passed HB4 allowing a referendum on the legalization of VLTs with the primary purpose for providing funds for public education. The question of legalization, which had been turned down in the past, came at time when all other surrounding states had permitted gambling in some form within state limits, making a compelling case for Maryland to do the same. Citing the financial benefits associated with its approval, the bill was passed by a large percentage of residents in November 2008. The amendment permits the issuance of five video lottery licenses and the operation of 15,000 slot video lottery terminals.

An initial license fee of \$3,000,000 for every 500 video lottery terminals is required and must be paid at the time of the application. In addition, bidders must exhibit a \$25,000,000 direct investment by the applicant for construction and related costs for each 500 video lottery terminals included in the bid. There is also an annual fee of \$425 per video lottery terminal. The Maryland tax rate is set at a very high 67% of gaming revenue.

The Maryland Education Trust Fund - Video Lottery Terminals, or Senate Bill 3, details the licensing scheme and regulatory structure for the video lottery terminal operators, manufacturers, and other parties directly connected to video lottery terminals. It also covers how Maryland will spend the proceeds from the operations of video lottery terminals. Some major provisions that the bill declares include, but are not limited to, the following:

- Not more than one VLT operation is permitted in a single county or Baltimore City.
- Individual or business entities may not own more than one VLT facility.
- Licensee must begin operation of VLT facility within 18 months of license being issued.
- VLTs can only be owned or leased by the State.
- All proceeds from operation of VLTs will be electronically transferred daily to the Maryland State Lottery Fund.
- Operating hours are set from 8:00 a.m. to 2:00 a.m.
- Facilities are responsible for all of their own marketing, advertising, and promotions.
- Facilities may not provide free food or alcoholic beverages.

The above conditions will impact revenue potential and scope of each gaming facility, both positively and negatively.

As a result of the high tax rate of 67% and the license fee requirement, coupled with other restrictions, and despite the regulated limit on licenses, only six total applications were received (on February 2, 2009) for the five potential licenses. These applications represented bids for less than half the potential gaming positions envisaged by the state. The results of the process were so disappointing that state officials considered rebidding and revisiting the conditions.

One of the locations in Allegany County received no bids and consideration is being given to the possibility of providing some incentives, perhaps reduced license fees, tax rate rebates, or other economic incentives to make the license more attractive for a possible rebid of the license.

The Baltimore license application that was initially approved has been subsequently been denied when the operator was unable to provide the additional license fee between the 500 machines it originally bid and that 3,750 machines it subsequently proposed for the site.

There are two other lessons arising out of the Maryland experience. The Baltimore site has also been found to have issues associated with environmental cleanup of the formerly industrial site, which, even if a developer is found to bid on it, could face additional expense and years of delay.

At the Anne Arundel Mill Mall site the Cordish Group is embroiled in a zoning dispute with local citizens who have gained a sufficient number of signatures (although this is being challenged in court by the Cordish Group) which could result in a November vote to overturn the local zoning approval. This effort, partly financed by the Maryland Jockey Club (MJC), could result in rebidding of the license. MJC would benefit as the Anne Arundel County license would be rebid offering the possibility that MJC's Laurel Park could then potentially end up with the license. This would represent a dramatic recovery for MJC, and Penn National (which recently bought a portion of MJC's assets in Maryland), from their earlier disqualified bid which was submitted by the parent entity Magna Entertainment (which recently filed for bankruptcy) without the required license fee.

The key lessons then, other than establishing a tax rate and license fee that are reasonable, is to be aware of potential site related and local zoning issues if specific sites are to be determined as part of the legislative process.

Thus, the primary goal of the process of legalizing casinos in Maryland,(i.e. government revenue generation for education and the revitalization of the horse racing industry), is unlikely to be realized to the extent envisaged in the Maryland legislation.

## Successful Gaming Environments

A number of jurisdictions have found a balance between the gaming tax rate and casino profitability. Jurisdictions with successful tax and regulatory environments include Nevada, Mississippi, Missouri, and the Bahamas.

### Nevada

Nevada is the second largest gaming jurisdiction in the world (trailing only Macau), with roughly \$50 billion in capital investment and another \$11 billion in planning stages, generating \$10.5 billion and over \$750 million in annual gaming revenue and gaming taxes and fees, respectively in 2009. The gaming industry in Nevada employs nearly 177,400 people and serves as the economic engine for most Nevada cities. As discussed at length, one of the key factors for the success of the industry is the low effective tax rate of 7.2%, as a lower tax rates encourage greater capital investment. In addition, the unrestricted gaming environment also helps to maximize revenue and profit potential and thus contributes to more capital investment. Yet despite the lowest effective gaming tax rate in relation to the comparable group, the Nevada casinos display one of the lowest EBITDA profit margins of around 20%. This is due to the intense level of competition in the market. As of March 2010, over 342 casino operations are competing for business in Nevada, 250 of which earn over one million dollars annually. In addition, Nevada competes with other local gaming markets. It is generally accepted that the tax

scheme in Nevada has resulted in achievement of the goals upon which it was based, namely the development of gaming facilities capable of attracting gamers from across the globe.

### Mississippi

Mississippi is in many ways similar to Nevada, with a relatively low effective tax rate and high capital investment. The Chief Executive Officer of Pinnacle Entertainment, a casino owner in Mississippi, noted that the Las Vegas-style gaming in Mississippi is a function of the low gaming taxes. The Mississippi casinos employ roughly 28,800 people. In 2009, the gaming industry in Mississippi generates roughly \$2.5 billion in annual gaming revenue, resulting in about \$295 million in taxes and fees. Again, despite Mississippi's low effective tax rate of about 12%, EBITDA profit margins are not unreasonably high due to a high level of competition. Mississippi has 29 casinos with nearly 1.4 million square feet of gaming space and 33,750 slot machines. Mississippi also competes with casinos in Louisiana, particularly New Orleans, and Baton Rouge. Thanks to the profit margins, gaming companies continue to invest money in Mississippi. Gaming operators are anxious to rebuild the Gulf Coast following the destruction caused by Hurricane Katrina. The reasonable effective tax rate still makes Mississippi a good place to do business.

### Missouri

Missouri's gaming tax strategy also works well, featuring a higher tax rate, relative to Nevada and Mississippi, in conjunction with a control on competition. Although Missouri's effective tax rate is higher than Nevada and Mississippi at 27.2%, the casinos still exhibit a reasonable EBITDA profit margin due to the limitations on competition associated with the policy of the regulatory agency, as discussed earlier. Since 1998, capital investment in Missouri was reported at \$2.9 billion, a significant amount for a state with only 13 casinos. The industry employs roughly 11,000 people, an average of about 850 per casino. Missouri generally features large casinos in the major markets with ample amenities including numerous high-end hotels. The profit margins encourage the existing casino operators to reinvest in their projects.

### Bahamas

The low effective tax rate of 6.9% has encouraged substantial capital investment, as witnessed not only in the development of Atlantis (just under \$2 billion) but also the several other mega-resort casino vying for a position on the island (an investment consortium which included Harrah's was interested in the market for a possible \$2.6 billion investment until that deal fell through for political reasons). In addition, the unrestricted gaming environment helps to maximize revenue and profit potential and thus contributes to the continuing flow of investors interested in the market. The country's 4 facilities generate \$225 million in annual gaming revenue from tourists alone, as locals are not permitted to participate in the activity. The Bahamas' largest casino resort displays reasonable EBITDA profit margins of around 30% per annum. This is due to both the managed jurisdictional environment - which to date has prevented further investment in a large-scale gaming product - as well as limited regional competition historically. The competitive situation is quickly changing as more Caribbean countries are liberalizing gaming laws as part of an attempt to lure more high-end tourists to their shores. This may have the "in-demand" Bahamas rethink their historical pattern of denying additional large scale development being sought there by so many able investors. Nonetheless the demand itself

is a tribute to the successful balance of tax structure, regulatory structure, and industry profitability.

Specific to the goals of Massachusetts, however, the experiences of the Bahamas can also offer cautionary guidance. While the jurisdiction has been wildly successful in attracting formidable investments, smaller facilities have not materialized. Generally a low tax environment would enable smaller investments just as it attracts larger ones. However, the Bahamas graduated tax scheme is regressive, it imposes higher rates on smaller operators (equivalent to 3.5 times the effective annual rate for the largest operators), essentially precluding development of these smaller facilities. A typical graduated tax scheme, for which there are numerous examples in the U.S., would tax smaller operators at lower rates and larger operators at higher ones. This would allow smaller properties to compete.

## *Identifying Policy Determinants of Gaming Industry Health & Development*

In this section of our study we will identify the general lessons to be learned from the evidence presented thus far as it applies to what should be the guiding considerations for gaming policy formation.

The primary benefits to be derived from the installation of casino gaming in any jurisdiction, as follows:

1. Economic Expansion
2. Long Term Maximization of Gaming Tax Revenue
3. Quality Gaming Product for Gaming Consumers
4. Industry with Long-Term Viability

## **Generating the Benefits of a Healthy Gaming Industry**

Keep in mind that Massachusetts's primary goal of creating jobs and maximizing state revenue directly relates to economic expansion (#1) and maximized gaming tax revenue (#2).

### **Economic Expansion**

Economic expansion is arguably the most often cited benefit of legalized gaming for any jurisdiction. Economic expansion is the direct result of capital investment in new facilities and equipment and the associated tax revenue generated by these capital assets. The end result is more jobs and increased spending in the local communities around the gaming markets. The capital investment generates primarily two categories of economic expansion including the construction impact and ongoing impact.

### **Construction Impact**

The construction impact relates to the initial spending on the bricks and mortar associated with the building project, whether a casino, parking garage, or restaurant. The construction impact is quantified in the form of salaries and wages to designers, managers and construction workers and

spending on the materials, usually acquired from local vendors, such as concrete and steel. The construction impact also includes an indirect component or multiplier effect as local businesses hire more people, build new facilities and buy additional equipment to accommodate the unusual increase in demand. For example, the concrete company may need to hire more drivers or buy additional trucks to handle the increase in business. The benefits associated with the construction impact are one-time in nature as they cease when the construction project is complete.

Obviously the larger the resort, the more amenities - and therefore the more complex the development and the greater the construction budget - hence more construction jobs are created compared to smaller facilities, or slots only facilities with limited amenities.

### **Ongoing Impact**

The ongoing economic impact relates to the operation of the finished project. Whether the completed project is a casino, parking garage or restaurant, it will require additional staffing and generate revenues over and above what is currently being realized. The ongoing impact is quantified again in the form of additional salaries and wages, and other expenditures associated with the project. For instance, a restaurant would generate new jobs and require additional spending on goods and supplies. Certainly, the majority of the jobs would be hired locally and a large portion of the spending on supplies would remain in the local economy. The ongoing impact also has a multiplier effect as local vendors hire more people and buy additional materials to accommodate the increase in business. In addition, customers visiting the new project will likely spend money in the area or on their journey to and from the area. These indirect expenditures include spending on food, gas, and local entertainment. The end result is more permanent jobs associated with gaming.

### **Long-term Maximization of Gaming Taxes**

The second benefit associated with a healthy gaming industry that invests capital is the maximization of gaming taxes in the long term. It has been demonstrated that unreasonable tax rates negatively impact industry health in the long term. Gaming revenue and gaming taxes will increase or decrease proportionally. Thus, whatever initial benefit gained by the jurisdiction by implementing an unreasonably high tax rate will not be sustainable given the likelihood of subsequent revenue declines. This is readily apparent in New York and Florida, where high tax rates have led to marginal investment and even closures due to unfavorable economics.

A healthy gaming industry perpetuates greater tax benefits to the state by enabling the gaming operator to maximize revenues. The casino operator will look to maximize gaming revenue and profit in relation to capital investment. In addition, the primary goal of most expansion projects in the gaming industry is to increase gaming revenue. Even with regard to a parking garage or restaurant expansion, the objective is to draw patrons to the casino. As discussed earlier, the revenue potential is one of the main variables in the Return on Invested Capital (“ROIC”) calculation as will be discussed in greater detail in later sections of this report. The revenue potential as well as the profit margin is generally higher for the gaming component. The direct revenue associated with an entertainment venue or restaurant would be considered ancillary.

### **Higher Quality Gaming Product (a more competitive product)**

Another end result of a healthy and profitable gaming industry is a high quality gaming product

for the gaming customer that will compete with gaming products offered by competitive tourist destinations in the region. As has been discussed at length in this report, profitability leads to capital investment and capital investment is geared towards generating additional gaming revenue. In order to realize this goal, the casinos will need to improve the gaming product. The gaming customer, especially in a competitive environment, will demand an increasing level of quality in exchange for a higher gaming budget. Therefore, in order to realize additional revenues, a gaming operation will need to improve the gaming product relative to its regional competition.

While the term gaming product typically refers to the quality of the facility, ability of the operator to offer new games, and the level to which considerate and polite staff effectively do their jobs, a second part of the quality of the product is related to the rewards that can be offered to players. In Las Vegas, a highly competitive market, large casinos on The Strip give back approximately 20% of gross gaming revenue back to players in rewards which can include goods and services on the property such as hotel rooms, meals, and products available in stores as well as services available off site such as flights, rounds of golf, day-trip excursions in the area, and other gifts. Cannery, which operates casinos that target local Las Vegas residents, offers an extensive rewards program where the casino partners with local businesses such as gas stations, dry cleaners, and local restaurants, for example.

### **Industry with Long-term Viability**

Finally, as the profitability of the gaming industry increases and the facilities evolve the long-term viability of the industry will be enhanced. The operators will be able to channel funds towards marketing and thus solidify their competitive position. The industry will be less susceptible to downturns in the economy and other market forces such as an increase in competition from competing gaming jurisdictions. In addition, as the industry exhibits signs of sustainability, the capital markets will be more willing to lend money to further grow the gaming market. Thus the cycle of additional capital investment will continue. With the ability to attract capital investment being a prime determinant of the gaming industry's health, the attraction of incremental capital investment would serve to support the vitality of the industry in the long-term. It is the long term viability of the gaming industry and the quality of the projects that will ensure that both the incremental flow of gaming tourists and the tax revenue stream for governmental entities will occur.

## ***Determinants of the Capital Investment Decision***

### **Requiring a Minimum Level of Capital Investment**

One of the development aspects that Massachusetts is considering is a requirement for a minimum level of capital investment for the "Destination Resorts". Several entities have suggested a minimum of a billion dollar investment for each of three casino licenses. This aspect raises several challenges in the current development environment. The first is that the economics of all sites are not the same, and if a casino resort were positioned in western Massachusetts, as demonstrated in the revenue forecasts, it would not likely generate as high of revenue as some potential locations in eastern Massachusetts and would likely be subject to less competition. An operator in this region may therefore determine that an investment in this region does not warrant the expenditure necessary in eastern Massachusetts. More importantly, the parameters set by the

financial markets, such as leverage limits and equity requirements, may be such that projects will not be viable at a pre-determined investment level.

Other questions can complicate the process also such as what constitutes the billion dollar investment? Are fees paid to architects, building inspectors, or other professional services included? What if land is contributed as part of the development, what value should it be included? Third, there are a limited number of operating companies that could finance such a development, which would dramatically limit bidding and reduce competitiveness. Also, what if a bidder proposes a second phase to open three years after opening that includes substantial parts of the facility? Should that investment also be considered?

Most importantly, however, requiring a substantial investment amount may result in financial instability and even bankruptcy as bidders increase investment amounts in an attempt to ensure they are selected. These distractions could further affect the performance of the facility as management is unable to focus on operating the property due to distractions in financing the property. In fact, we would suggest that consideration be given to maximizing the amount of leverage that a facility can have as sort of a “circuit breaker” to ensure that a project is not set up for failure out of the box.

In a competitive bidding process with a reasonable effective tax rate, where the competition dictates a substantial investment, and the RFP includes that the investment amount will be part of the decision criteria it is likely that substantial investments will be attracted. We believe that this is the most appropriate course of action in order to attract a higher number of strong bidders for each license in the Commonwealth. We do believe that a definition of a “Destination Resort” can be designed to ensure that from a size perspective there is a minimum level of facility developed; but again, allowing the marketplace to dictate what will be developed through a bidding process will essentially take care of this issue to a great extent.

The facilities that currently exist in Connecticut represent significant investments. Similarly, the Twin River facility in Rhode Island has undergone a major expansion and is likely on the cusp of another expansion if table games are offered. Large investments in these facilities were necessary to attract the population bases in the region, of which Massachusetts is a significant component. While any operator in Massachusetts will have an advantage based on location (in attracting the residents of the Commonwealth), the facility itself will have to provide a comparable experience, including amenities such as hotels, spas, food and beverage outlets, and retail outlets to compete. In other words, experienced operators recognize that a substantial investment will be required regardless of what the Commonwealth requires.

We do believe that on an ongoing basis it is important to recognize the need for continual reinvestment in these facilities and that this aspect of the developments should not be ignored. The high traffic volume in casinos and the expectations from consumers that they be well-maintained, high quality facilities requires ongoing capital expenditures. Substantial expenditures can include upgrading flooring, furniture, fixtures, and equipment. These expenditures will be necessary in a competitive environment. The most reasonable and easily administered program we know of exists in British Columbia and was emulated in New Brunswick. In British Columbia, 4% of gross gaming revenue is collected by the province

(Lottery commissions, in these cases) and held for capital expenditures. While capital expenditures in these jurisdictions need to be approved, the requirements on the regulator may be adjusted in Massachusetts so as to not create an unnecessary burden.

### **Capital Investment Levels and the Capital Markets**

The existence of a profitable gaming industry will enhance capital investment in any jurisdiction. A profitable or healthy gaming industry exists when a gaming company can realize a reasonable return on investment by putting forth a quality gaming product. Although the concept of profitability and what is reasonable can be debated, there is no arguing that a certain level of profitability is necessary in order to entice capital investment.

A company will evaluate a potential market by weighing the potential for operating profitability against the number of factors that exist in the broader market situation which would further detract from that estimated profit potential. Gaming companies will naturally invest capital in the projects that have the potential to generate the most profit. Thus, if at first brush, the market looks promising relative to other investment opportunities being considered, the potential investor will seek to determine the level of investment necessary to achieve a return which matches the risk of making the investment in the target market.

The capital investment decision model weighs the cost of acquiring capital against the estimated ROIC. The cost of acquiring capital is a function of interest rates and the returns required by equity investors. The ROIC is calculated by dividing the expected profitability of a project by the estimated cost of the project. If the ROIC meets a required rate of return or hurdle rate, the company is likely to move forward with the project. Generally, hurdle rates in the gaming industry range between 20% and 30%, based upon the market dynamics, risks associated, licensing and regulatory environments, cost of capital, and other considerations.

As mentioned, profitability will be further eroded by a number of market factors external to the operating potential of the opportunity. These factors must also weigh into the capital investment decision. In the section below, we examine the following factors of this type:

- Tax Burden
- Stability of Tax Burden
- Leverage Issues
- Regulatory Environment

### **Gaming Tax Burden**

Gaming taxes (including purse distributions in racino environments) are a major component when estimating the profitability of gaming projects. An exceptionally high gaming tax burden will make it difficult for gaming companies to achieve the profit level necessary to realize a reasonable return on investment. In turn, the number of new and or expansion projects in a gaming market will be reduced. The gaming tax rate impacts the hurdle rate since gaming tax rates are applied to top line gaming revenue. For instance, a 1% increase in the effective tax rate would generally decrease the EBITDA profit margin by at least 1%. Projects with a forecasted ROIC in the low end of the range would be tabled in the face of higher taxes, including expansion projects which typically have a lower ROIC than the overall casino development.

The required return (hurdle rate) will often vary between gaming companies depending on several factors including the company's cost of capital or the cost of borrowing money. Gaming companies will also impose a higher hurdle rate on projects that exhibit more risk. The risk factors associated with an expansion project include the uncertainty associated with the profit forecast. More specifically, risk factors associated with the gaming industry include the prospect of additional competition and higher taxes as well as the normal uncertainty associated with estimates. Investors generally require a return on investment in relation to the risk profile of the project. The risk profile of a project also dictates to some extent the cost of borrowing money to fund the project.

The other major component effecting the projected ROIC is the level of competition. As mentioned herein, the expenses related to a high level of competition lead to lower margins. Nevada provides the best example, where a low effective tax rate does not lead to higher margins for operators, but rather investments in facilities, marketing, and player development that leads to one of the world's most robust offerings.

### Considering Requirements on Capital Investment or Development Scale and Scope

Fundamentally, the idea of an up-front license fee can realistically only be achieved alongside the government's guarantee to the operator that the competitive situation "at the time of purchase" will not change; or, only has the potential to change according to explicit and established guidelines. This confers a level of certainty to the investment which decreases the risk involved for the investor. A viable term of such an agreement can be either indefinite (as in Pennsylvania and Indiana) or discrete (as in Portugal and Singapore). Thus, the fee implicitly reflects the value of the opportunity to operate in a strictly managed market environment over a set period of time.

This *quid pro quo* exchange (fee for right to operate) is utilized by governments seeking to generate large and immediate fiscal benefits (with the added benefit of creating barriers to entry, which ensures participation of stronger firms). The same logic can also be manipulated and applied by governments not seeking quick ways to fill their coffers, but rather to reap some other benefit, such as igniting the tourism industry through directly encouraging development of the most attractive casino resort facilities. Essentially this is done by calling for a minimum level of capital investment or imposing a set of development guidelines in return for the right to operate. Effects can be enhanced by executing such an offer through a competitive RFP process, which in the most desirable markets can have companies competing to develop projects well above the minimum requirement.

In an environment without a competitive bid process (such as the negotiation between the government of the Bahamas and Atlantis), we've seen that linking tax incentives to future development can incentivize additional capital investment or be used as a tool to guarantee investors come through on their capital investment promises. Thus the discussion of such requirements and how they are implemented is a relevant consideration in how to best attain goals while maintaining the balance of tax and industry profitability. It is important to note that

joint-marketing and a near monopoly position also played a major role between the Bahamas and Atlantis.

### Stability of Tax Rate Structure

The stability of the tax rate structure will also impact the investor's ability to acquire the necessary capital on terms that make the project economically feasible. An unstable gaming tax rate environment will increase the risk profile of a potential project and thus the cost of capital for the project. The lenders in the gaming industry are particularly cognizant of the risk factors associated with the industry and will assign a higher risk premium (and thus charge a higher interest rate) for projects associated with a gaming environment that exhibits volatility, such as one where the gaming tax rate structure changes often or new competition is constantly being added.

The Illinois example may be the single best example of the challenges that result when there is no tax rate stability. The state's decision to alter the tax rate ultimately caused a loss in jobs and taxable gaming revenue that ultimately led to a lower overall economic contribution to the state.

Again, a higher risk premium means a higher interest rate for the gaming company. In turn, a higher interest rate means certain projects with lower ROIC estimates will not be undertaken. The cost of debt capital or interest rates in the gaming industry for risky projects can often reach 10% to 14%. Therefore, the estimated ROIC must be substantially higher in order for the investor to earn a return, generally in the 25% to 30% range for most gaming companies.

### Leverage and Financing

While having a percentage of debt in the capital structure is likely to lower a project's overall cost of capital, as noted previously, especially in today's markets, the debt markets will place restrictions on the relative proportion of debt to equity which can be used to develop a project. Borrowers will typically look to certain credit statistics to determine an appropriate capital structure and the maximum amount of debt, which can be used for a project. Project financings in the gaming industry were typically governed by the following parameters up through 2007:

- Maximum debt limited to 5.0x-6.0x projected steady state EBITDA
- Cost of Debt Capital = 7%-14%
- Implied Cost of Equity Capital = 17%-30%

The recent economic crisis and turmoil in the capital markets has changed the above metrics, at least for the short term. Exacerbating the situation has been widespread defaults and restructurings in the gaming business. Once thought to be "recession resistant", revenues in the gaming industry have declined significantly in most markets at a time when capacity has reached an all-time high with gaming proliferations around the country.

In today's market the above metrics look more like the following:

- Maximum debt limited to 4.0x-4.5x projected steady state EBITDA

- Cost of Debt Capital = 10%-15%
- Implied Cost of Equity Capital = 20%-30%

In a leveraged environment, where debt is utilized to finance the development, operators must be able to attract debt financing at reasonable rates and under reasonable terms. Utilization of high levels of leverage or financing facility developments with high-yield or “junk bond” rates inserts a significant additional element of risk into the project. In addition, there are restrictions including a limit on the amount of debt an operator can raise for a project, generally 4.0x to 4.5.x the amount of EBITDA the project can generate. Lenders will also generally require that EBITDA be equal to at least twice the interest expense associated with the debt incurred. Therefore, if EBITDA is impaired by higher gaming taxes, the gaming operator may be unable to borrow the money necessary to fund the project. License fees are also generally included in the amount of money to be borrowed and are part of the overall financing package. Therefore the assessment of any license fee will automatically reduce the amount that can be borrowed to fund construction of a quality gaming facility. If however a license fee is to be considered, a concomitant decrease in tax rate, at least for the period over which the license fee would be financed, (typically eight to nine years) should be considered in order to offset the impact of the license fee on borrowing ability.

The following table provides an example of potential development figures for the low and high estimated gross gaming revenue (“GGR”) and earnings before interest, taxes, depreciation, and amortization (“EBITDA”) for three of the forecasted facilities. For a further discussion of EBITDA and its relation to the financing and capital decisions in the gaming industry, please refer to the EBITDA Estimates section of this report. These specific examples were chosen to demonstrate the estimated investments that can be expected based upon 1) the forecasted EBITDA levels, 2) assumed tax rates and 3) the existing parameters dictated by the current financing environment. Discussions with several finance professionals confirmed that current debt financing for casino developments dictate that the estimated total debt a facility could issue is approximately 4 times its estimated EBITDA. (There may be several exceptions to this norm for certain companies with outstanding credit ratings and balance sheets). The table shows the debt capacity for the selected examples range from \$522.0 million for the low case in Scenario 2, Region 3 to \$880.8 million for the high case in Scenario 2, Region 2. With debt comprising approximately 70% in the current financing environment, the additional equity investment and resulting total potential investment are demonstrated in the last two rows of the table. Total potential investments range from approximately \$745.7 million to \$1.3 billion. These are substantial investments that a sophisticated developer in an environment with reasonable costs can leverage to build substantial facilities capable of achieving the forecasted revenue levels.

### **Estimated Total Potential Investments for Selected Examples (\$M)**

	Scenario 2		Scenario 2		Scenario 4B	
	Region 2		Region 3		Region 1	
	Low	High	Low	High	Low	High
Gross Gaming Revenue	\$504	\$685	\$422	\$478	\$448	\$570
EBITDA	\$163	\$241	\$128	\$153	\$141	\$191
Debt Capacity assuming multiple of 4	\$651	\$963	\$510	\$612	\$563	\$764
Equity Investment assuming 70/30 debt/equity ratio	\$279	\$413	\$219	\$262	\$241	\$327
Total Potential Investment	\$930	\$1,375	\$729	\$874	\$804	\$1,091

Source: The Innovation Group

## **Regulatory Environment**

Casinos operating in regulatory environments that maximize revenue potential, and thus profitability, can afford a higher effective tax rate (license fees, development requirements, etc.). A regulatory environment that limits competition, via a managed market, with no gaming regulatory restrictions generally maximizes gaming revenue potential for individual casinos, such as in Indiana and Louisiana. On the other end of the spectrum would be regulatory environments that restrict gaming and utilize a free-market approach concerning competition.

## ***The Selection Process***

In gaming jurisdictions where there are no limits on the number of licenses, development opportunities are usually limited by market. However, in an environment whereby licenses are limited in number (as is being considered in Massachusetts), a process must be implemented to fairly choose from a pool of applicants. There are numerous examples of jurisdictions that have utilized an RFP or bidding process for determining how licenses are awarded.

The process of selecting operators/developers/licensees can include several steps designed to create an early dialogue between respondents and the government entity charged with the selection process. This entity is usually a Gaming Commission which is charged with oversight, monitoring, infractions, and other related considerations. In New York, a panel made up of elected representatives attempted to make a selection for the Aqueduct license.

The best approach in our opinion is to solicit proposals.

## **Request for Qualifications**

The objective of the first step is to preliminarily qualify candidates by identifying their level of interest, their commitment to win the selection process, and their ability to finance the proposed resort development, normally referred to as the Request for Qualifications (“RFQ”) process.

The goal of the process is to develop a list of qualified applicants that are interested in the opportunity moving forward. Public announcements using industry trade journals are effective in reaching the appropriate parties and ensure that the process is public and open to all qualified

bidders. Marketing summaries of the opportunity will be circulated to respondents, and they will be invited to participate in submit a response to the RFQ.

The RFQ will provide a summary of the opportunity including the location, population and tourist data, tax and licensing guidelines, and a request for qualifications of a potential respondent. Qualifications will include information on the organization's capital resources, existing operations, principals, and ownership. In addition, the firm should describe how they will analyze the opportunity.

Respondents' submissions are typically compiled, screened, reviewed, and summarized. To the extent necessary, data and information provided will be verified, and if necessary any discrepancies will be clarified. The goal of the review will be to identify serious organizations to move forward in the RFP process, and a list of applicants will be developed.

### **Request for Proposals**

The RFP will outline the requirements of the submission. The qualification criteria will include location, level of investment commitment, financial stability including the demonstrated ability to provide the necessary development financing, forecasted revenue, earnings, and employment, and the ability to operate a destination resort. The ability to qualify for one of the licenses will be of utmost importance as well as past and current projects.

The RFP document typically includes instructions stipulating the parameters of the submission including language, currency, and other standards, responsibilities for expenses and the ownership of proposals, and applicable laws and obligations. Major components can include:

- The parameters of the relationship between the government and the successful bidder, including gaming regulations and oversight.
- The details of the opportunity including obligations of the successful bidder, required payments, and rights of the licensee.
- Minimum building requirements including the size of the facilities, quality of finish, and available amenities.
- Details regarding key personnel.
- Forecasted revenue, earnings, and employment.
- The expected level of revenue that would have accrued out-of-state in the absence of gaming in Massachusetts.
- Details on the successful bidder's plan to finance the opportunity.
- Guidelines for responses, including the method of making inquiries, components required in a proposal, and method, medium, and timing for submitting a response.

Integral to the RFP will be details on the relationship between the government and the licensee. Details include the structure of the license including its covenants, term, associated fees, and regulatory obligations as well as obligations of the government including emergency, public, and utility services and gaming oversight and regulation.

Other regulatory and legal matters will include the ownership requirements of the licensed entity, licensing requirements, security and surveillance obligations, renewal parameters, land ownership and/or lease arrangements, and social safeguards.

The RFP will also outline the scope and content of the respondents' proposals. This can include the minimum requirements or outline a structure for the proposal to include details on the development concept, amenities, and positioning, the required investment and timing for the construction, financing details, financial projections, employment, marketing and operating strategies, potential environmental impacts (including traffic and social impacts) and future plans for potential expansion.

Evaluation criteria can also be outlined, as was included in the Singapore RFPs discussed earlier. These can include any number of criteria, but we suggest that the governing body develops conceptual outlines and communicates important elements to bidders rather than developing strict guidelines. This allows bidders to be creative in their responses, leveraging their experiences in and knowledge of other market areas, and allows the market to determine the required level of investment, hiring criteria, and other investment and operating decisions in light of the criteria outlined by the Commonwealth during a competitive bidding process.

### *On-Going Capital Expenditures*

Previously, we noted the possibility of including the concept of a mechanism that would set aside some funding for ongoing Capital Expenditures for the casino properties in Massachusetts. The focus behind such a concept is to ensure that the facilities in Massachusetts remain competitive with other regional facilities, even during possible economic swings.

Given the estimates of the volume of visitors that are expected to patronize various aspects of the facilities, it is important that the properties be well-maintained, that carpeting is replaced, slot machines are upgraded and replaced and other public spaces are well maintained and are appealing to consumers. We suggest that a percentage of annual net gaming revenues (i.e. 3.5%) be set aside for such ongoing capital expenditure requirements.

Consideration should be given as to whether the money set aside under this mechanism should include "maintenance capital expenditure" items or just new expansions or major changes to the facility. The concept that we have suggested is meant to act as a minimum requirement and to be inclusive of "maintenance capital expenditures" as long as they are treated as such and capitalized on a company's books. This concept therefore would include items such as refurbishment, machine upgrades and other normal ongoing capital replacement items and not just be oriented towards major expansions or redevelopments. It is our opinion that any expansions, major developments or addition of significant amenities to a facility should be market driven meaning that operators will react to the market opportunities and competitive landscape and only then would move forward on major capital projects.

This concept is generally consistent with how the hotel industry has traditionally viewed their business from the perspective that ongoing reinvestment and capital maintenance is an ongoing aspect of operating a facility. In the gaming industry, this concept has been included in a number

of bank credit agreements where lenders wanted to ensure that the facility is maintained properly and remains competitive and protects a lender's collateral.

Some possible language, taken from credit agreements, with changes applicable to Massachusetts, might read as follows:

“Commencing upon (date of opening), and continuing during the license period, licensees shall make, or cause to be made Capital Expenditures (see below for definition) to the Destination Resorts in a minimum aggregate amount equal to or greater than 3.5% of net gaming revenues derived from the facility”

Given the up-front fees that are recommended and the fact that the facilities will be new developments, we suggest that this requirement be implemented commencing with the third year of operations.

In terms of the definition of Capital Expenditures, again, in our opinion, the definition should apply to ongoing “Maintenance Capital Expenditure” items in addition to major expenditures for expansion and redevelopment. The definition should include “the amount of money spent by a licensee to upgrade or maintain depreciable and tangible long-term physical assets and that are capitalized on the licensee's books under GAAP. The term "*Capital Expenditures*" should not include expenditures or charges for the usual and customary maintenance and repair of any fixed asset which generally are expensed as “maintenance and repair” items on a company's books.

### *Summary of General Policy Implications*

In order to maximize the economic impact in Massachusetts, the Commonwealth needs to ensure that the industry must be viable and sustainable for the long term and provide an overall experience that is competitive. Also, a system must be in place to ensure capital investment and thus the development of attractive and competitive facilities. To accomplish this proposed new projects and expansion projects must achieve a certain level of profitability.

In the gaming industry, the profitability of a project is highly dependent on a number of determinants - those under control of the government include the gaming tax burden and the regulatory environment. Profitability is necessary in order to attract capital to the market. The amount of capital and the cost of capital will be dependent on the risk profile of the market. An unreasonably high effective tax rate or an unstable rate environment will increase the risk profile of any project. The risk profile of a larger-scale project is also particularly susceptible to uncertainty in regulatory environments. In markets where the production of the gaming industry is expected to be of a more modest magnitude, attracting larger projects will also require a more strictly managed market environment. Therefore, the tax and regulatory structure and their respective stability remain a dominant component in the battle to maximize capital investment.

However, it is important to remember that capital investment will not vary across markets strictly according to the tax regime or employed regulatory mechanisms individually, but rather in relation to the combined tax and regulatory environment. Ideal calibration of the two policy levers does not only consider government objectives but also market realities (what is the value of the opportunity being presented). Additionally the efficacy of any given combination

tax/regulatory policy may be enhanced or reduced depending upon method of implementation, which through examples of various RFP processes we have shown must be in-line with market realities as well.

Several jurisdictions have enabled casino gaming to become a substantial tourism generator through a combination of low taxes and a high degree of competition. These include Nevada, New Jersey, and Mississippi. Other jurisdictions in the United States have chosen a regional model in which a limited number of licenses create a controlled environment that enables lower regulatory burdens, greater levels of investment, and higher taxation in exchange for a lower level of competition. More recently, jurisdictions have instituted fixed license fees while still enabling a competitive bidding process for licenses. In turn, subjecting this model to greater competition undermines the foundation on which it was built and has led to significant challenges, specifically in New York and Maryland and to varying degrees in other jurisdictions.

This report has highlighted how a healthy gaming industry will in fact lead to a number of simultaneous benefits. The fiscal benefits include tax revenue for the governmental entities and programs, and economic expansion. Economic expansion leads to more jobs and increased spending on goods and services in the state. Economic expansion is a direct result of the capital investment associated with the gaming facilities. In setting gaming industry policy, gaming regulators should be mindful of the trade-offs between long-term benefits associated with a healthy industry and the temporary increase in gaming taxes generated by a higher effective tax rate.

# GAMING REVENUE ESTIMATES

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## *Regional Economic Overview*

An area's economic health and growth potential are indicative of its ability to support gaming development. In this section, some of the specific economic and demographic characteristics of the three regional market area were analyzed. The demographic data included total population, gamer population and household income. The data was procured from Claritas and IXPRESS. The methodology for which they obtain the data is described below.

## **Claritas Methodology**

The Claritas Demographic Update is produced each year for many geographic levels including national, state, county, place (city/town), census tract, and block group. Data is also available for commonly used areas such as metropolitan areas, ZIP Codes, and media areas such as DMAs. Because they are produced for small areas, the updates can be easily aggregated to custom geographic areas specified by the user.

The update starts with the estimation and projection of base counts, such as total population, household population, group quarters population, households, family households, and housing units. Characteristics related to these base counts are then estimated. Population characteristics include age, sex, race, and Hispanic ethnicity. Households are estimated by age of householder and income, family households are estimated by income, and owner-occupied housing units are estimated by value.

The updates are prepared first for large geographic areas, then for progressively smaller areas, with adjustments ensuring consistency from one level to the next.

## **Base Counts**

Base counts are available for population, households, family households, group quarters population, and housing units. At the national, state, county, and place geography levels, base count information is based on information from the Census Bureau and, in some cases, state demographers. At the census tract and block group levels, base count information is based on sources including local estimates, trends in United States Postal Service (USPS) deliverable address counts, counts from the new Claritas Master Address List, and trends in consumer counts from the Equifax TotalSource database. For the purposes of our analysis, The Innovation Group gathered data based on zip code level.

## **Household Income**

Income estimates and projections reflect the census money income definition, and are produced for current dollar values. Rates of change in median income are estimated first, then the 2000 census income distributions are advanced to reflect the estimated rate of change. Income estimates at the county level and above reflect income change estimated by the Bureau of Economic Analysis (BEA) as well as income change indicated by statistics from the Internal Revenue Service (IRS).

Income change at the tract and block group levels is estimated based on a combination of:

- Change in consumer financial information from the Equifax Consumer Marketing Database
- Change in income summarized from the TotalSource consumer household database
- Projections of inter-censal trends

Distributions of 2000 census income are advanced to the estimated and projected years through a process that estimates the movement of households from one income category to the next based on the specific area's estimated rate of income growth.

## Regional Demographic Data

### Total Population

Total population in Massachusetts was estimated at nearly 6.5 million in 2009. The population base is expected to remain relatively stagnant, increasing at an annual rate of just over 0.2% over the next five years, reaching just over 6.5 million by 2014, a total increase of approximately 63,100 people. The expected growth rate for this area is well below than the national average at 1.0% per year.

Region 1 accounts for approximately 58% of the total population in Massachusetts, largely due to the inclusion of Boston and its suburbs. With nearly 3.8 million residents, the region is expected to grow at an annual rate of 0.2% over the next five years increasing the population by nearly 45,200 by 2014. Region 2 accounts for approximately 29% of the state's population with nearly 1.9 million residents. This area is also expected to grow at approximately 0.2% annually over the next five years increasing the population by nearly 19,300 to just over 1.9 million. The smallest in terms of population, Region 3 accounts for the remaining 811,600 residents, approximately 13% of the state's population. The population in Region 3 is expected to decline over the next five years by a very minimal 0.03% annually to reach nearly 810,300 by 2014. The following table illustrates the total population statistics for the defined regions.

**Massachusetts Regional Area Population**

Ring	2000	2009	2014	A.A.G. 2000-2009	A.A.G. (2009-2014)
Region 1	3,685,303	3,762,906	3,808,105	0.2%	0.2%
Region 2	1,848,101	1,884,478	1,903,740	0.2%	0.2%
Region 3	815,681	811,639	810,260	-0.1%	0.0%
Massachusetts	6,349,097	6,459,022	6,522,101	0.2%	0.2%
United States	281,421,906	306,624,699	322,320,436	1.0%	1.0%

Source: Ixpress/Claritas, The Innovation Group

### Gamer Population

The gamer population (those persons 21 years and older) was estimated at 73.6% of the total population in 2009 for Massachusetts, or nearly 4.8 million gamer adults. The proportion of

gamer adults is slightly higher than the national average. Over the next five years, the proportion is expected to increase to 74.4%.

Region 3 exhibits the lowest gamer adult percentage of 73.1% while Region 2 shows the highest at 73.7%. Each segment is expected to age over the next several years as baby boomers become seniors. The gamer population figures are detail in the table below.

#### **Massachusetts Regional Population 21 Yrs. And Over**

Ring	2009	% of Total Population	2014	% of Total Population	A.A.G. (2009-2014)
Region 1	2,771,272	73.6%	2,830,198	74.3%	0.4%
Region 2	1,388,794	73.7%	1,421,171	74.7%	0.5%
Region 3	593,099	73.1%	602,974	74.4%	0.3%
Massachusetts	4,753,088	73.6%	4,854,279	74.4%	0.4%
United States	218,752,605	71.3%	231,586,328	71.8%	1.1%

Source: Ixpress/Claritas, The Innovation Group

#### **Average Annual Household Income**

The Average Annual Household Income (“AAHI”) for the Massachusetts was estimated at approximately \$83,500 in 2009. This figure is about 20% higher than the national average of about \$69,400. Over the next two years the states AAHI is expected to grow at an annual rate of approximately 2.2%, reaching nearly \$93,000 by 2014. This growth rate is slightly higher than the national average 2.0%.

Not surprisingly, Region 1, which includes the major urban areas of Greater Boston area, exhibits the highest income level of \$97,000, followed by Region 2 at \$88,500, and \$69,000 for Region 3. Over the next five years, Region 2 is expected to grow the fastest at 2.3% annually. These figures are illustrated in the table that follows.

#### **Massachusetts Regional Average Household Income**

Ring	2000	2009	2014	A.A.G. 2000-2009	A.A.G. (2009-2014)
Region 1	\$75,720	\$95,963	\$106,761	2.7%	2.2%
Region 2	\$69,363	\$88,473	\$99,036	2.7%	2.3%
Region 3	\$55,730	\$68,969	\$75,874	2.4%	1.9%
Massachusetts	\$66,365	\$83,473	\$92,950	2.6%	2.2%
United States	\$56,644	\$69,376	\$76,521	2.3%	2.0%

Source: Ixpress/Claritas, The Innovation Group

## *Existing and Proposed Competition*

The following section outlines the competitive factors in the southern New England market. Casino gaming is currently offered in three New England States: Connecticut, Rhode Island, and Maine. The Center for Policy Analysis at the University of Massachusetts at Dartmouth estimated that in 2009 residents of Massachusetts spent \$967.4 million at casinos in New England including \$237 million at in Rhode Island and \$731 million in Connecticut. The scale and distance of casino gaming in Maine is not a significant draw for gamers in Massachusetts. Massachusetts and New Hampshire are considering legalization of casino gaming, which will lead to further growth and competition in the market.

### **Connecticut**

Connecticut has two large-scale casino resorts, Foxwoods and Mohegan Sun, and represents a relatively mature gaming environment, generating approximately \$1.5 billion in slot machine revenues annually. Foxwoods opened with table games in 1992, and first introduced slots in 1993, while Mohegan Sun opened in 1996. The tribes are only required to publicly report their slot revenues to the State, as the State receives 25% of the slot revenues.

In May 2008, Foxwoods unveiled its \$700 million expansion with its strategic partner MGM Mirage. This expansion included an 825-room hotel, 4,000-seat theater, over 100,000 square-foot of additional convention center, and 1,400 additional slot machines. With this expansion, the casino housed over 8,200 slot machines, but the property has since reduced its slot count to an average of 7,641 slots. Additionally, the property has an estimated 430 table and poker games, and over 2,200 hotel rooms. In August 2008, Mohegan Sun completed the first phase of its \$925 million expansion known as "Project Horizon". Additions included the 64,000 square-foot "Casino of the Wind" casino expansion with 650 new slots machines, 20 table games and 42 poker tables; a Jimmy Buffet's Margaritaville Cafe; and a 2,600 square-foot deli. Their next phase features a 1,500-seat House of Blues music hall; a 1,000-room hotel with 300 suites dedicated to the House of Blues theme; a 22,000 square-foot Mandarin Spa; and a 1,500-space parking facility. In September 2008 Mohegan Sun announced its suspension of the phase two "Earth Expansion" due to current economic conditions. The company expressed intentions to reevaluate the building program upon recovery of the market. Currently, Mohegan Sun has an average 6,752 slots, 380 table and poker games and 1,200 hotel rooms.

Combined, the two casinos have approximately 14,393 slots and over 800 table games. Foxwoods also offers the world's largest bingo hall. However, Mohegan Sun's slot revenues were approximately 12% greater than Foxwoods' in 2009, thereby yielding a significantly higher win per slot. In spite of their recent expansions, both properties have not fared well over the last two years as 2009 slot revenues fell below 2008's numbers as a result of the economic slowdown. The table on the following page details the historical performance of both properties from 2002 to 2009.

### Connecticut Slot Revenue 2000-2009

Year	Foxwoods			Mohegan Sun			Total
	Slots	Slot Revenue	Win per machine	Slots	Slot Revenue	Win per machine	Slot Revenue
2000	5,828	\$759,479,077	\$356.06	3,030	\$548,779,093	\$494.88	\$1,308,258,169
2001	6,194	\$783,344,820	\$346.50	4,165	\$618,571,822	\$406.93	\$1,401,916,642
2002	6,560	\$789,319,127	\$329.64	6,202	\$730,781,309	\$322.84	\$1,520,100,436
2003	6,629	\$791,793,627	\$327.22	6,120	\$793,954,458	\$355.43	\$1,585,748,085
2004	6,930	\$805,537,280	\$317.59	6,248	\$840,025,608	\$367.32	\$1,645,562,888
2005	7,351	\$815,302,589	\$303.88	6,223	\$868,774,303	\$382.47	\$1,684,076,892
2006	7,035	\$816,810,594	\$318.11	6,197	\$917,665,730	\$405.72	\$1,734,476,324
2007	7,232	\$783,357,701	\$296.75	6,061	\$901,151,565	\$407.36	\$1,684,509,266
2008	7,734	\$728,047,927	\$257.21	6,300	\$842,873,026	\$365.57	\$1,570,897,953
2009	7,641	\$684,424,106	\$245.42	6,752	\$763,879,790	\$309.95	\$1,448,303,896

Source: Connecticut Division of Special Revenue

In terms of regional competition, table games only exist in the Connecticut market. These games are not currently subject to revenue sharing and therefore some statistics go unpublished. However, since Mohegan Sun has raised public debt, some information does come from filings with the Securities and Exchange Commission (“SEC”). Information from the Mohegan Sun Tribal Gaming Authority (“MSTGA”) SEC filings is found in the following table for years ending on September 30. Based on published statistics for Connecticut and Pennsylvania (the organization also financed a development in the Poconos), and details provided in one filing on table game revenue for the year ending in 2009, the following estimates were derived. Based on 2009 performance, it was estimated that 1.56% of gross gaming win in Connecticut is derived from the keno, poker, and racebook operations. This ratio is consistent with other facilities and was used for all years detailed in the following table.

Table game play at Mohegan Sun grew from approximately \$268 million in 2003 to \$370 million in 2007 before starting to decline. Over this period the ratio of table play to all play was 30.4%. During the last five years, table play has averaged 32.3% but did drop to 28.8% in the last fiscal year.

### Mohegan Sun Table Games Analysis

Year Ended September 30	Net Gaming Rev, MSTGA, (000)	Reported Slot Win, PA	Reported Slot Win, CT	Estimated Keno, Poker, and Racebook	Estimated Table Win, MS	MS Table Win as a share of GGR
2003	\$1,061,376	\$0	\$776,641,718	\$16,562,115	\$268,172,168	25.3%
2004	\$1,125,145	\$0	\$832,812,373	\$17,557,191	\$274,775,436	25.9%
2005	\$1,202,196	\$0	\$860,906,596	\$18,759,524	\$322,529,880	30.4%
2006	\$1,279,835	\$0	\$905,037,571	\$19,971,032	\$354,826,397	33.4%
2007	\$1,469,343	\$157,182,978	\$921,651,315	\$20,475,444	\$370,033,263	34.9%
2008	\$1,410,774	\$176,213,395	\$855,858,563	\$19,264,553	\$359,437,489	33.9%
2009	\$1,320,000	\$217,267,466	\$779,625,076	\$17,207,458	\$305,900,000	28.8%

Source: Mohegan Sun Tribal Gaming Authority, State of Connecticut, Commonwealth of Pennsylvania, The Innovation Group

The ratio of table game revenue to all revenue at the Mohegan Sun property is relatively high compared to some the markets, largely due to the presence of the hotel, which is heavily used in promotions for table game players, and the location of the facility relative to its population base, which encourages longer stays. Based on table counts and input from a number of industry experts, the ratio of table play to all play at Foxwoods is similar to that of Mohegan Sun. As such, the following estimates of Foxwoods performance were made assuming the same ratio of table win to gross gaming win and that 2.5% of win came from poker, keno, racebook, and bingo. This ratio compares to 1.5% for Mohegan Sun, which was adjusted upward to account for the addition of bingo.

### Estimated Foxwoods Gross Gaming Revenue, 2003-2009

Year	Reported Slot Win	MS Table Win as a share of GGR	Estimated Table Win	Estimated Other Winnings <sup>1</sup>	Estimated Gross Gaming Revenue
2003	\$791,793,627	25.3%	\$276,960,322	\$27,403,947	\$1,096,157,897
2004	\$805,537,280	25.9%	\$291,213,934	\$28,121,826	\$1,124,873,040
2005	\$815,302,589	30.4%	\$369,163,442	\$30,370,924	\$1,214,836,955
2006	\$816,810,594	33.4%	\$426,205,118	\$31,872,198	\$1,274,887,910
2007	\$783,357,701	34.9%	\$436,018,007	\$31,266,044	\$1,250,641,752
2008	\$728,024,927	33.9%	\$387,441,307	\$28,601,698	\$1,144,067,932
2009	\$684,424,106	28.8%	\$287,218,255	\$24,913,907	\$996,556,267

Source: The Innovation Group, Mohegan Sun Tribal Gaming Authority, State of Connecticut

1) Assumes combined poker, keno, racebook, and bingo winnings comprise 2.5% of GGR

### Rhode Island Gaming Overview

While lower than the gaming revenue at the Connecticut tribal gaming facilities, the revenues at the two pari-mutuel facilities in Rhode Island are substantial when compared to most other slot-style gaming venues in the nation. Rhode Island's facilities offer video lottery terminals ("VLTs"), which are similar in format to slot machines, but have a central server system which provides for randomness across all games, rather than having each machine operating independently.

The larger of the two properties is the Twin River Casino, located at the greyhound racing facility in Lincoln, near Providence and proximate to the metropolitan Boston area. The casino operates approximately 4,741 VLTS and generated 86% of the state's VLT revenues in 2009, or nearly \$400 million. The smaller of the two Rhode Island facilities is the Newport Grand, which operates 1,484 VLT's and was once home to the state's jai alai fronton and still offers simulcast wagering on pari-mutuel races.

Gaming revenues at Twin River have increased year over year from 2002 to 2005, with a slight dip in 2006, likely a result of an ongoing expansion to the property which added approximately 500 slots. Revenue increased thereafter peaking at \$407 million in 2008 before declining in 2009 as a result of the economic slowdown. Newport Grand had significant growth in revenue in 2003 and 2004, adding over 200 slots to their gaming floor. Revenue was relatively flat during the next three years, with a notable decline in 2007 continuing into 2009 at \$61 million. This decline was due not only to expansion at Twin River, but also expansion at the two Native American facilities in Connecticut. As result of this decline, their share of statewide gaming win declined from 19% to 15% from 2006 to 2009. Revenues for the two properties are detailed in the chart on the following page.

### Rhode Island Historical Gaming Revenue 2002-2009

Year	Newport Grand			Twin River			Total
	Slots	Slot Revenue	Win per machine	Slots	Slot Revenue	Win per machine	Slot Revenue
2002	776	\$64,415,181	\$329.64	1,702	\$234,180,353	\$376.96	\$298,595,534
2003	902	\$69,622,818	\$327.22	2,155	\$263,875,157	\$335.54	\$333,497,975
2004	1,020	\$79,056,187	\$317.59	2,483	\$304,772,574	\$335.43	\$383,828,761
2005	1,046	\$78,011,743	\$303.88	2,950	\$332,901,564	\$309.15	\$410,913,307
2006	1,070	\$77,139,655	\$318.11	3,583	\$329,364,417	\$251.81	\$406,504,072
2007	1,074	\$72,701,038	\$185.43	4,237	\$375,379,866	\$242.75	\$448,080,905
2008	1,244	\$67,546,725	\$148.39	4,748	\$407,503,857	\$234.49	\$475,050,582
2009	1,484	\$61,505,924	\$113.54	4,741	\$399,662,955	\$230.97	\$461,168,880

Source: Rhode Island Lottery Commission

There is currently an initiative to enable Twin River and Newport Grand to offer table games. It is likely that this initiative is at least in part a competitive response to the potential expansion of gaming in Massachusetts. While it appears that the tax rate on VLT play will remain relatively high and continue to put the Rhode Island facilities at a competitive disadvantage, the tax rate for table games, if permitted, has yet to be determined.

### The Southern New England Market

In total, the southern New England market includes four facilities, two located in Rhode Island and two Native American facilities located in Connecticut. The two Rhode Island facilities, enabled through the state's lottery division, have historically paid 72% of gross gaming revenue from VLTs to the state's general fund and other initiatives and have not offered table games. The two Connecticut facilities pay 25% of gross gaming win from slot machines as part of a revenue sharing agreement with the state and pay nothing on table game win. The benefit of not paying a tax on table games puts the effective tax rate at 18%.

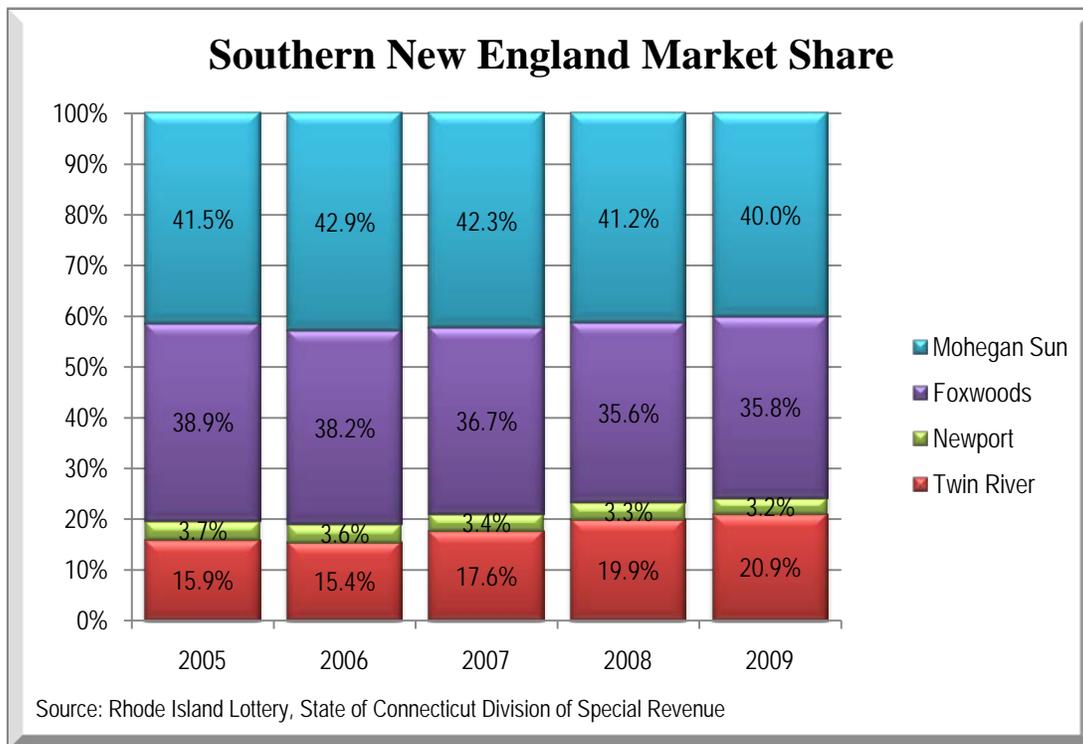
Despite high revenue sharing obligations, growth in revenue at the Twin River Casino has outpaced regional growth in four of the last five years. In fact, the construction and subsequent business interruption in 2006 is the only year that blemishes this performance. In addition to the expansion at the Twin River facility, other factors led to the market dynamics over that timeframe, three of which will be detailed here. First, the expansion of the Connecticut facilities also expanded during the detailed time frame. In May of 2008, Foxwoods opened a \$700 million expansion, and in August of that year Mohegan Sun opened the first phase of a \$925 million expansion. Additionally, road construction on the main roadway serving Foxwoods hampered access. Next, high fuel prices in 2008 led to a decrease in overall gasoline consumption and may have discouraged visitation. Finally, turmoil in the financial industry and financial markets started in the last quarter of 2008. During the ensuing recession overall gaming behavior as reflected in the number of gaming trips has dropped nationwide, as have average gaming budgets.

**Southern New England Gross Slot/VLT Revenue (\$M)**

	2005	2006	2007	2008	2009
Twin River	\$332.9	\$329.4	\$375.4	\$407.5	\$399.7
Growth	9.2%	-1.1%	14.0%	8.6%	-1.9%
Newport	\$78.0	\$77.1	\$72.7	\$67.5	\$61.5
Growth	-1.3%	-1.1%	-5.8%	-7.1%	-8.9%
Rhode Island	\$410.9	\$406.5	\$448.1	\$475.1	\$461.2
Growth	7.1%	-1.1%	10.2%	6.0%	-2.9%
Foxwoods	\$815.3	\$816.8	\$783.4	\$728.0	\$684.4
Growth	1.2%	0.2%	-4.1%	-7.1%	-6.0%
Mohegan Sun	\$868.8	\$917.7	\$901.2	\$842.9	\$763.9
Growth	3.4%	5.6%	-1.8%	-6.5%	-9.4%
Connecticut	\$1,684.1	\$1,734.5	\$1,684.5	\$1,570.9	\$1,448.3
Growth	2.3%	3.0%	-2.9%	-6.7%	-7.8%
Southern New England	\$2,095.0	\$2,141.0	\$2,132.6	\$2,045.9	\$1,909.5
Growth	3.2%	2.2%	-0.4%	-4.1%	-6.7%

Source: Rhode Island Lottery, State of Connecticut Division of Special Revenue

Cost advantages and remote locations are part of the reason that the Connecticut facilities have built a number of amenities and offered substantial rewards to players. Additionally, the expansions of all three facilities have helped to insulate the aforementioned from adverse macroeconomic conditions. Over this time frame the Twin River facility, which is the most convenient alternative for residents of the metropolitan Boston area, has gained market share at broad expense. The proximity of the facility and the success of its expansion are factors in the gain in market share and are indicative of the depth of the market opportunity in the region.



## New Hampshire

Recent legislation, SB 489 (as amended) seeks to legalize 9,750 video lottery machines and table games in New Hampshire. The bill, which has passed the Senate but was voted down in the House, would allow gaming in five locations: Rockingham Park in Salem, Seabrook, a planned golf resort in Hudson, and two other locations to the north.

The bill being voted down in the house, in combination with threats of a veto by the governor, is currently impeding the expansion of gambling in the state. While these two political branches have stifled gaming, the expansion of gaming in neighboring states, in addition to the ongoing need for revenue, continues to motivate even these parties towards an eventual solution. Within days of the house voting down SB 489 (as amended), several representatives who voted against the bill suggested changes that would garner their support. The most recent compromised being discussed would develop a gaming commission in advance of legislation that would be formed by December 2010.

One of the biggest backers of the failed bill, Millennium Gaming, has stated that if they are granted a license, they plan to invest \$450 million into renovating Rockingham Park in Salem, New Hampshire. The facility is located about 35 miles from downtown Boston and could offer (according to SB 489) between 3,750 and 5,000 machines.

As with Massachusetts, the expansion of gaming in New Hampshire will provide additional competition to the existing properties in other New England states.

## Indicators of Gaming Behavior in New England

The following section presents indicators of gaming behavior in New England as reported by several sources which include the University of Massachusetts-Dartmouth Center for Policy Analysis, the Mohegan Tribal Gaming Authority, Harrah's Entertainment, and the Las Vegas Convention and Visitors Authority.

### University of Massachusetts-Dartmouth Center for Policy Analysis

The University of Massachusetts-Dartmouth Center for Policy Analysis publishes an annual report entitled "New England Casino Gaming" with the purpose of reporting gaming statistics and financial data for Foxwoods Resort Casino, Mohegan Sun Casino, Twin River, Newport Grand Slots, and Hollywood Slots Hotel & Raceway. Information relating to Mohegan Sun Casino, Foxwoods Resorts, and Twin River Casino is presented as these are the primary destinations for residents of Massachusetts.

### Total Gaming Spend

Key information was extracted from these reports in order to best highlight the gaming behavior of individuals from Massachusetts. The first of the two charts below highlights the total gaming spends of individuals from the New England area as well as New York and New Jersey at the Foxwoods Resort Casino.

State	2009	2007	2006	2005	2004
Massachusetts	\$350,139,053	\$402,990,690	\$405,909,124	\$409,130,755	\$411,804,461
Rhode Island	\$127,145,466	\$145,524,416	\$162,130,369	\$154,845,529	\$176,160,797
Connecticut	\$311,017,371	\$369,408,132	\$388,413,041	\$329,483,343	\$303,133,839
New Hampshire	\$27,385,177	\$34,701,976	\$36,158,571	\$34,927,562	\$29,741,433
Maine	\$11,736,505	\$15,671,860	\$15,163,272	\$17,463,782	\$19,446,322
Vermont	\$2,934,126	\$4,477,674	\$5,832,028	\$8,149,765	\$6,863,408
New York	\$110,518,751	\$102,986,510	\$104,976,497	\$139,710,252	\$121,253,536
New Jersey	\$19,560,841	\$21,268,953	\$23,328,111	\$61,705,361	\$45,756,051
Other	\$17,604,757	\$22,388,372	\$24,494,516	N/A	\$28,597,532
<b>Total</b>	<b>\$978,042,047</b>	<b>\$1,119,418,583</b>	<b>\$1,166,405,529</b>	<b>\$1,155,416,349</b>	<b>\$1,142,757,379</b>

Source: University of Massachusetts at Dartmouth Center for Policy Analysis

The chart shows that total gaming spend was highest from Massachusetts, which consistently drove more than one-third of all total gaming spend occurring at the property. Connecticut was responsible for the second highest total gaming spend and in combination with Massachusetts made up two-thirds of total gaming spend at Foxwoods. This high concentration is to be expected given the location of the Foxwoods Resort in Connecticut and its proximity to Massachusetts.

Notably, the trends for the Mohegan Sun were quite different than those seen at the Foxwoods property. The following table shows the Center's estimates for that property.

### Mohegan Sun Casino: Total Gaming Spend

State	2009	2007	2006	2005	2004
Massachusetts	\$200,953,856	\$261,416,860	\$272,153,044	\$274,935,791	\$250,495,637
Rhode Island	\$48,880,668	\$57,536,725	\$59,899,713	\$96,468,698	\$66,798,836
Connecticut	\$613,723,940	\$659,170,742	\$686,242,363	\$554,695,017	\$1,828,426,509
New Hampshire	\$15,207,319	\$25,015,967	\$26,043,354	\$21,705,457	\$17,892,545
Maine	\$7,603,659	\$10,006,387	\$10,417,342	\$9,646,869	\$10,735,527
Vermont	\$4,344,948	\$5,003,193	\$5,208,671	\$4,823,435	\$4,771,345
New York	\$170,539,219	\$177,613,369	\$184,907,810	\$188,113,962	\$233,795,927
New Jersey	\$10,862,371	\$30,019,161	\$31,252,025	\$55,469,502	\$48,906,291
Other	\$14,121,082	\$25,015,967	\$26,043,354	N/A	\$32,206,581
<b>Total</b>	<b>\$1,086,237,062</b>	<b>\$1,250,798,371</b>	<b>\$1,302,167,676</b>	<b>\$1,205,858,731</b>	<b>\$2,494,029,198</b>

Source: University of Massachusetts at Dartmouth Center for Policy Analysis

Unlike Foxwoods, which saw Massachusetts producing the highest amount of total gaming spend in 2009, Connecticut was solely responsible for two-thirds of the aggregate total gaming spend at Mohegan Sun. Massachusetts followed Connecticut producing roughly 19% of total gaming spend with New York accounting for 16%. This pattern was consistent from 2004 through 2009.

Combined for 2009, residents of New England put forth an estimated \$1.7 billion in total gaming spending, accounting for approximately 83% of all gross gaming revenue for these two facilities. Furthermore, Massachusetts and Connecticut combined made up more than \$1.4 billion, or 71%, of gross gaming revenue for these facilities. Ultimately, the concentration of total gaming spend resulting from these two states demonstrates a strong willingness for individuals originating in Massachusetts and Connecticut to game.

#### Visitor Origin

While the section above outlined gaming behavior in terms of expenditure, the chart below highlights the visitation by origin of state. While the two charts are similar, differences in spend per visit is expected due to income levels, distance traveled, frequency of visitation, and the variety of games offered, among other factors. The chart below outlines estimated patron origins and visitation as reflected in the 2009 University of Massachusetts-Dartmouth Center for Policy Analysis study.

The most recent capture for Foxwoods, February of 2010, shows Massachusetts making up the greatest proportion of visitors at nearly 36%. Connecticut contributed the second highest amount of visitors during this capture at 31.9%. These results are very similar to the dispersion of total gaming spend seen above. Notably, Foxwoods saw more visitors from Connecticut in January 2009 than it did from Massachusetts. Given how close visitation rates are from these two states, and the small capture window of a month, it makes sense that outside forces, such as weather, road construction, or business interruption due to construction could account for some fluctuations.

### Foxwoods Estimated Patron Origin

State	Oct-95	Feb-99	Apr-04	Feb-06	Feb-08	Jan-09	Feb-10
Massachusetts	33.0%	36.0%	36.0%	34.8%	36.0%	31.4%	35.7%
Connecticut	29.0%	28.3%	26.5%	33.3%	33.0%	35.9%	31.9%
Rhode Island	14.3%	13.3%	15.4%	13.9%	13.0%	13.2%	13.0%
New Hampshire	0.0%	3.0%	2.6%	3.1%	3.1%	3.2%	2.8%
Maine	0.0%	1.5%	1.7%	1.3%	1.4%	1.1%	1.2%
Vermont	0.0%	0.7%	0.6%	0.5%	0.3%	0.3%	0.3%
New York	10.8%	11.9%	10.6%	9.0%	9.2%	10.8%	11.3%
New Jersey	0.0%	0.0%	4.0%	2.0%	1.9%	2.1%	2.0%
Other	12.9%	5.3%	2.5%	2.1%	2.1%	2.0%	1.8%
<b>Total</b>	<b>100%</b>						

Source: University of Massachusetts at Dartmouth Center for Policy Analysis

Note: Due to rounding percentages may add up to more or less than 100

Similar to Foxwoods, the distribution of gamer visits to Mohegan Sun was similar to that of gaming revenue, with Connecticut being the leading source of visitation. Massachusetts and New York made up the second and third greatest contributors to visitation respectively.

### Mohegan Sun Estimated Patron Origin

State	Feb-99	Apr-04	Feb-06	Feb-08	Jan-09	Feb-10
Massachusetts	22.8%	21.0%	20.9%	20.9%	16.6%	18.5%
Connecticut	46.0%	44.3%	52.7%	53.8%	56.7%	56.6%
Rhode Island	7.8%	5.6%	4.6%	4.2%	3.9%	4.5%
New Hampshire	1.8%	1.5%	2.0%	1.5%	1.3%	1.4%
Maine	0.8%	0.9%	0.8%	0.6%	0.4%	0.7%
Vermont	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%
New York	15.6%	19.6%	14.2%	14.8%	15.9%	15.7%
New Jersey	0.0%	4.1%	2.4%	1.9%	1.8%	1.0%
Other	4.8%	2.7%	2.0%	2.2%	3.1%	1.3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: University of Massachusetts at Dartmouth Center for Policy Analysis

Note: Due to rounding percentages may add up to more or less than 100

The chart below outlines visitation to the Twin River facility as show in the 2010 University of Massachusetts- Dartmouth study.

### **Twin River Estimated Patron Origin**

State	Apr-04	Feb-06	Feb-08	Jan-09	Feb-10
Massachusetts	34.6%	40.5%	42.3%	40.6%	47.5%
Connecticut	0.0%	0.6%	1.4%	2.4%	1.4%
Rhode Island	65.4%	57.8%	54.6%	54.6%	48.9%
New Hampshire	0.0%	0.2%	0.6%	0.9%	1.0%
Maine	0.0%	0.1%	0.1%	0.2%	0.2%
Vermont	0.0%	0.0%	0.0%	0.1%	0.1%
New York	0.0%	0.2%	0.3%	0.5%	0.2%
New Jersey	0.0%	0.1%	0.1%	0.1%	0.1%
Other	0.0%	0.5%	0.6%	0.7%	0.6%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

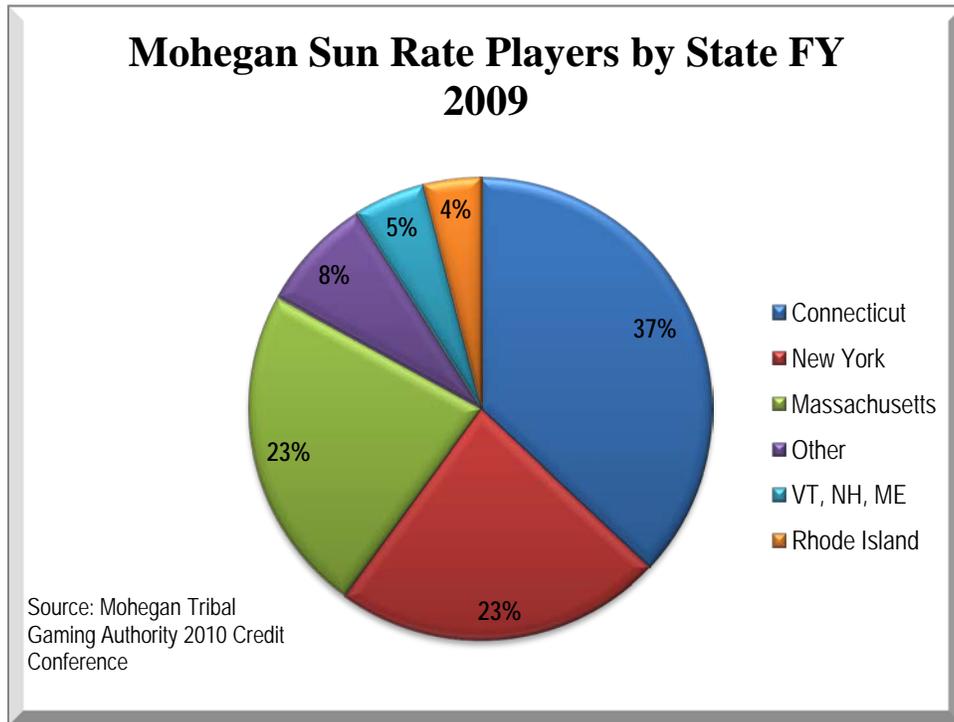
Source: University of Massachusetts at Dartmouth Center for Policy Analysis

Note: Due to rounding percentages may add up to more or less than 100%

This chart shows that as of February 2010, visitation to Twin River from Massachusetts was second only to Rhode Island. However, the chart does display a clear trend of growing visitation from Massachusetts and a declining visitation, in terms of percent of total visitation, from Rhode Island. Despite this trend the two points of origin make up over 95% of total visitation to the facility. While the small proportion of visitation and spend originating in Rhode Island for Foxwoods and Mohegan Sun may have shown a decreased participation rate in gaming, the high concentration of visitors from Rhode Island demonstrates that the proximity of the Twin River establishment makes it the preferred choice for the current customer base. Furthermore, the large percentage of visitation seen across all three charts from Massachusetts shows that there is a strong propensity to game within the state as residents are willing to travel regionally in order to game.

### **Mohegan Sun Tribal Gaming Authority**

Due to the incorporation of public debt in Mohegan Sun’s capital structure, its financial statements and additional information are made available to the public. As a result, the casino puts forth online presentations from its annual conferences. The most recent data, from the 2010 Credit Conference is shown in the chart below. While this data is not an exact match to that put forth by the University of Massachusetts, we believe it to be more accurate as it takes into account a longer time frame and comes directly from the operator.



The chart shows that Connecticut made up the largest amount of rated play at 37%. Notably, this information shows that New York and Massachusetts produced equal amounts of rated play at 23%. Assuming the statistics are representative of the all play, New England was responsible for 69% of total visitation.

While this information differed from that shown from the University of Massachusetts-Dartmouth, conclusions can still be made that there is a strong desire to game coming from both Connecticut and Massachusetts as these two states combined made up 60% of all rated play for FY2009 and gives a very similar picture of a region in which there is a strong propensity to game as facilities are being visited primarily by individuals from New England.

### Harrah's Entertainment

Harrah's Entertainment publishes a study regarding gaming behavior across the United States. The most recent study was published in 2006 and was entitled "Harrah's Survey: Profile of the American Casino Gambler." The study is based off the responses from two surveys, the National Profile Study and the U.S. Gaming Panel, conducted by Roper Reports GfK NOP and TNS. The information extracted for the purpose of understanding the gambling behavior of individuals in the New England area came from the U.S. Gaming Panel's survey and had a margin of error that ranged from +/- 1.3% to 1.7%.

The most salient information published in the Harrah's study revolves around casino participation rates. The study concludes that the percentage of adults that have gambled within the last 12 months nationwide was 25%. The study goes on to show that five states in the North

East (New York, Massachusetts, Connecticut, New Jersey, and Rhode Island) had higher gaming participation rates but did not divulge what those rates are.

Harrah’s study further breaks down participation rates in key feeder markets. Participation rates reported in 2003 and 2006 for the Boston DMA are show in the chart below.

**Gaming Participation Rate**

DMA	2006	2003
Boston	26.0%	26.6%

Source: Harrah's Profile of the American Casino Gambler

While the chart shows a change in gaming participation from 2003 to 2006, it is statistically insignificant given the margin of error. What it does show is that participation rates for individuals in the Boston DMA (designated market area) are similar to what is seen as an average across the country. Out of the feeder markets listed, Boston had the sixth highest participation rate ranking behind the DMA’s of New York City, Los Angeles, Chicago, Philadelphia, and San Francisco-Oakland-Santa Rosa.

**The Las Vegas Convention and Visitors Authority**

Each year the Las Vegas Convention and Visitors Authority releases information regarding the top 50 fly-in feeder markets. While Las Vegas is a gaming destination, these statistics nonetheless show the willingness of those individuals coming to Las Vega, where gaming is a major part of the entertainment offering. The chart blow shows the number of deplaned passengers from Boston/Providence/Manchester and Hartford, two of the top 50 fly in markets.

The following table displays the change in deplaned passengers over time through 2008, the most recent data available. The chart shows that the numbers of passengers deplaning from Hartford declined from 2004 to 2008 while the number coming from the Boston area airports increased from 2004 to 2008 and peaked in 2006. While these statistics are not used to directly derive propensities for gaming, they do show that individuals in the New England area have a willingness to game and will travel to do so as over 380,000 did in 2008 representing 1.7% of the approximately 22 million individuals who deplaned in Las Vegas.

**New England Feeder Markets to Las Vegas**

City	2004		2005		2006		2007		2008	
	Deplaned Passengers	% of Total								
Boston/ Providence/ Manchester	234,115	1.1%	260,180	1.2%	365,535	1.6%	339,685	1.5%	310,595	1.4%
Hartford	97,605	0.4%	93,575	0.4%	94,000	0.4%	86,040	0.4%	76,195	0.3%
<b>Total</b>	<b>331,720</b>	<b>1.5%</b>	<b>353,755</b>	<b>1.6%</b>	<b>459,535</b>	<b>2.0%</b>	<b>425,725</b>	<b>1.9%</b>	<b>386,790</b>	<b>1.7%</b>

Source: Las Vegas Convention and Visitors Authority

Note: % of Total refers to the percentage of total deplaned passengers from all markets.

## *Forecasted Gross Gaming Revenue*

### **Major Assumptions**

The generation of revenue estimates for Massachusetts included several assumptions that were integral to the modeling process. Those include:

- The current economic recovery continues at a modest pace; and
- Aqueduct Casino opens in New York offering 4,500 VLT machines; and
- A casino in Oxford, Maine opens offering 750 slot machines; and
- Legislation is passed in Rhode Island that allows for table games to be offered at the existing VLT facilities in Rhode Island, and Twin River expands to facilitate the expanded offering; and
- Smoking is permitted on 25% of the floor space on the casino floors in each of the Massachusetts facilities, which will include a cross-section of all games permitted each respective facility (see the Smoking Impact section of this report for information regarding the impact a smoking ban could have on the estimates contained herein); and
- All commercial facilities open on January 1, 2014 with the first stabilized year of operations being calendar year 2016; and
- All facilities are marketed and operated by experienced, professional management teams; and
- A high level of customer service and security is customary at all facilities.

In addition, more detailed information on the several assumptions is provided in the following sections of the report.

### **Gaming Taxes**

Gaming taxes are typically assessed on Gross Gaming Revenue or Adjusted Gross Gaming Revenue. Gross Gaming Revenue is defined as the total amount wagered in a casino less the total amount rewarded in prizes. In addition to the deduction for payouts, Adjusted Gross Gaming Revenue makes an additional deduction for what is known in the industry as free play, or free play credits issued to players by the operator as part of a promotion. Allowances are commonly made for free play to avoid the double taxation of revenue and in recognition that marketing promotions are designed to drive additional play that in turn generates more revenue for the state.

In developing revenue estimates, The Innovation Group assumed that taxes are assessed on Adjusted Gross Gaming Revenue and that those taxes are consistent with the taxes outlined in House Bill 4591. A wide range of tax structures are enforced in other jurisdictions and are detailed in a separate section of this report. Ultimately we understand that several different tax structures will likely be considered by the legislature, and as a starting point the current House version was used for modeling and comparison purposes only in order to create a baseline case. Economic theory dictates that, like all industries, lower taxes will result in a higher level of reinvestment on behalf of stakeholders at the proposed Massachusetts facilities and higher revenue. Likewise, higher taxes will generally lead to lower revenue levels. The gaming industry is particularly sensitive to this issue due to a high degree of fixed costs associated with

developing facilities and the fact that taxes are assessed on a revenue level rather than earnings, like many other industries. More information on the relationship between gaming taxes and revenue is provided in the Tax and Regulatory section of this study.

### **Liquor Regulations**

Liquor regulation in Massachusetts dictates that pricing must be consistent at all times for all customers. Known as the ‘happy hour’ regulation, operators would not be permitted to provide free liquor to some patrons, but may be able to provide free liquor to all patrons. This would likely lead to developing an environment that would not be conducive to serving gaming clients. While we have assumed that the liquor regulation remains unchanged, it is customary that casino resorts provide free liquor to their clients while on the premises, both while playing and at other locations on property including food and beverage outlets and in hotel rooms. The Innovation Group recommends that, in an environment with growing competition, that the current liquor regulations be waived for casino gaming properties.

### **Quality of Facilities**

All of the proposed casino resort facilities are assumed to be of high quality relative to their market opportunity. In the case of the Destination Resort casinos, this assumption includes hotels and food and beverage outlets offering a variety of choices and price points with a high quality finishes. Other likely amenities would include some combination of hotels, meeting and conference facilities, live entertainment venues, and retail. In the case of racing facilities, limited slot counts will lead to limited investments leading to less attractive facilities with amenities likely to include food and beverage outlets and limited other options. Obviously there is correlation between the scope and size of a project and related amenities and the amount of revenues and taxes that it can generate on a variety of levels. Full-scale resort facilities with related amenities such as conference centers, entertainment venues, etc., also are more likely to attract out-of-state visitors or tourists given the overall entertainment experience offered.

### **Regional Forecasting**

As will be explained in the following Local Market Methodology section of this report, the gravity model used in the forecasting process is highly sensitive to the specific locations at which casino facilities are assumed to be located. For specific locations requested by the Commonwealth such as the existing horse tracks and former dog racing facilities this does not present a challenge. However, no specific locations were provided for the three regional facilities. Hence, we prepared ranges of potential revenue for those proposed facilities.

In order to create the range of forecasted visitation and gross gaming revenue within each region, a number of plausible locations were selected and tested during the modeling process by The Innovation Group. The criteria for the selection of locations included an adequate transportation network, land available for development near existing highway exchanges, and locations that are likely to be considered by developers and operators. Broadly speaking, developers and operators will work within constraints (such as the regions indicated herein) to select locations that exhibit the highest potential for profitability. Beyond the aforementioned conditions, selection criteria included for this exercise focused on the existing competitive environment and the ability of a location to compete by either intercepting gamers that would be driving to those existing facilities and/or being near (and accessible from) population centers. While the location alone

provides some variance in revenue levels, slight changes in the development of the market (gaming behavior) can also result due to the accessibility of a location and were also taken into consideration. Factors not included in this analysis include, but are not limited to, the relationship of a facility within a local community, the direct expenses related to specific sites (variances for access to utilities, site work, etc.), and the degree to which a management team may be successful.

### *Local Market Methodology*

In order to estimate the gross gaming revenue that will be generated due to assumed casino gaming expansion in Massachusetts a gravity model was developed. This model is used to project gaming revenue for the market taking into account current estimated gaming factors that have been derived from primary research on gamers in the local market and across the United States, comparisons to other markets for which we have data available, and data provided by the Mohegan Sun Tribal Gaming Authority.

A gravity model is typically employed to calibrate the market behavior of residents living within reasonable driving distance of a proposed development. The model is sensitive to the accessibility of a proposed development from each postal code within the market area, and the subsequent distribution of gaming visits within the market is thus based on empirical evidence that has been observed in other gaming markets. Gravity models are commonly used in location studies for commercial developments, public facilities, and residential developments. The general form of the equation is that attraction is directly related to a measure of availability such as gaming positions and inversely related to the square of the travel distance. In other words, the gravity model quantifies the effect of distance on the behavior of a potential patron and considers the impact of competing venues.

The gravity model used for Massachusetts included the identification of distinct market areas. Using our GIS software and Claritas database, the gamer population, latitude and longitude, and average household income is collected for each postal code.

Each of these market areas is assigned a unique set of propensity and frequency factors (defined in the following pages). Surveys and analysis of player databases from operating casinos and studies of gaming behavior in numerous gaming jurisdictions have shown that both propensity and frequency are inversely related to travel time to a casino. In other words, as travel times increase, both the percentage of persons who gamble and the number of times they visit a casino tend to decrease. Gaming behavior also varies based on the availability and quality of the gaming experience. Alternative forms of entertainment are also a factor in determining gaming behavior. For this analysis, propensity and frequency rates for each market area are based on survey data presented earlier in this report and extrapolating information provided in public filings and published reports on gaming behavior in the region.

Gamer visits are then generated from postal codes within each of the market areas based on these factors and distributed among the competitors based upon the size of each facility, its attractiveness, and the relative distance from the postal code in question. The gravity model then calculates the probabilistic distribution of gamer visits from each market area to each of the gaming locations in the market.

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

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

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

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

- **Propensity.** Propensity measures the proportion of the gamer population within a market that is likely to participate in gaming. Generally this factor decreases with distance from the market center. For full service casinos this can be as high as 60% in fully developed casino markets such as the Mississippi Gulf Coast, or in markets where competitive entertainment and food and beverage options are extremely limited. This measure is type dependent in that it refers to the propensity of individuals who are likely to participate in that form of gaming.
- **Frequency.** This measures the average number of visits that an adult with a propensity to gamble will make annually to a gaming venue in the subject market. Frequency is a function of annual gaming budget as indicated by income variations, the number of venues in the market, and the quality and type of gaming facility. The frequency of visitation is inversely related to distance from a gaming venue, as fewer trips are made as convenience declines. However, the length of the average gaming trip increases with distance, such that an annual gaming budget for those living relatively far from a gaming venue may approach that of those living close by, for whom short gaming trips are typical.
- **Gamer Visits.** This measure is used to specify the number of patron trips to a gaming market, where an individual can make any number of separate visits in the course of a year. In order to estimate the gamer visits, market penetration rates, made up of the separate measures of propensity and frequency, are applied to the adult population in each postal code.
- **Win per Visit.** This variable is the average win per visit for all gaming visits within a market or market segment. This tends to increase with distance as the individual gamer makes fewer trips per year and is likely to maximize his or her participation for the trips that are made. It also varies based on income and inflation and on specific facility characteristics such as the degree of overcrowding and the mix of machine

denominations. Publicly available statistics on win per admission and other primary research conducted by The Innovation Group is used as the foundation for this analysis.

- **Attraction Factors.** Attraction factors measure the relative attraction of one casino in relation to others in the market. Attraction factors are applied to the size of the casino as measured by the number of positions it has in the market. Positions are defined as the number of gaming machines, plus the number of gaming seats at the tables. A normative attraction factor would be one. When this is applied to the number of positions in a casino, there is no change in the size of the casino as calculated by the model and hence its attraction to potential patrons. A value of less than one adjusts the size of the casino downwards and therefore makes it less attractive. Conversely, a value greater than one indicates that the casino has characteristics that makes it more attractive and hence adjusts its calculated size upwards. Due to the complexity of the issues involved, attraction factors in this case are composed of a number of components; each assessed individually, and then combined in an average. This provides for explicit consideration of each of these factors. The sensitivity of the model to changes in the factors is not in the nature of a direct multiplication. For example, a doubling of the attraction factor will not lead to a doubling of the gamer visits attracted to the site. It will however cause a doubling of the attractive power of the casino, which is then translated via non-linear equations into an increase in the number of gamer visits attracted to the casino. This is based upon the location, size and number of competing casinos and their relationship to the market area to which the equation is applied. The variation of these factors is based upon The Innovation Group's experience in developing and applying these models, and consideration of the existing visitation and revenues. While this does not provide directly convertible measures to calculate the attraction factors, it does provide guidance on the direction and degree of variation. This represents the "art" rather than the science of modeling.

The demand analysis process is composed of the following steps:

- **Market Area Definition.** This step defined the geographic market region analyzed. This area is subdivided into sub-markets which reflect patterns of visitation and the influence of existing and potential future competition. Demographic data is obtained by postal code for each of the sub-markets for input into the demand model. This data is obtained for current year estimates and future projections and takes into account the future possible locations of competition and potential new sites; then market areas are defined. These reflect access to gaming opportunities and provide sufficient flexibility to model future demand patterns. The distribution of these gamer visits coupled with considerations of equality of access to gaming opportunities, natural boundaries, access and potential future gaming sites and competition drives the development of sub markets. The model is then geographically segmented to allow us to address changing market dynamics as new competitors come on line.
- **Trip Generation.** The next step in the analysis is to generate gamer visits from each of the geographic market segments. This is done initially based upon our experience and follows the typical pattern of declining propensity and frequency the further away from a

casino venue a market area is. Propensity and frequency factors are assigned for each market area and are combined into a participation rate that is applied to the adult population in each of the postal codes within that geographic market segment.

- **Trip Distribution.** Through application of the gravity model, the generated gamer visits in each postal code are distributed among the various competing locations. This distribution is dependent upon the distance from the postal code in question and the size and attractiveness of the competing casinos.
- **Revenue Estimation.** A win per visit is then applied by sub-market to the generated gamer visits based on income variations and frequency of visit, thus, deriving the total gaming revenue for each competing location.
- **Model Calibration & Future Year Normative Projections.** To ensure that the model is accurately representing the dynamics of the market, it is calibrated to mirror existing revenues at each facility and its competitors, and the distribution pattern of gamer visits among the geographical market segments. This entails adjusting the total number of gamer visits by changing propensity and frequency factors until the universe of gamer visits approaches that which is required to generate observed regional revenues. Next, an iterative process of adjustments is made to attractions factors and friction factors. Attraction factors refer to the overall attraction value of the casino and incorporate such elements as the presence and size of amenities, location, access, and gaming type. Friction factors work at the individual geographic market level making it harder or easier to travel from that market to a specific casino venue. These reflect the observed patterns of visitation and account for elements such as geographic boundaries, ease of access, congestion, speed of travel and other idiosyncrasies of the market place. Projections for future years are derived by replacing current year demographics with future year demographics, inflating the win per visit, and adjusting gaming participation rates incrementally to account for growing acceptance.

## Market Carve-out

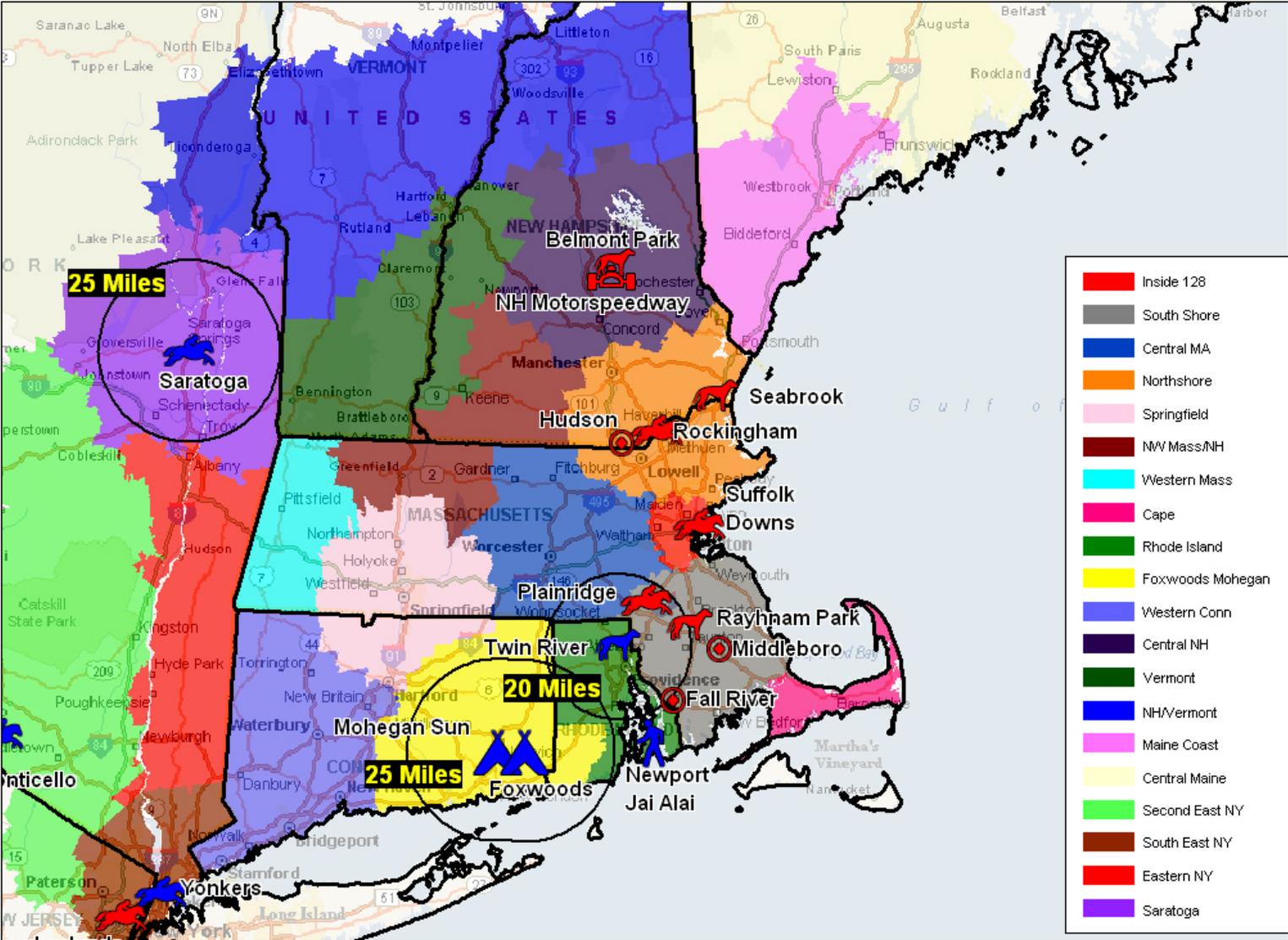
To apply this model it is necessary to carve the market into distinct geographic sub-markets, within which could be expected different gaming participation rates depending on the level and location of competition present in the market currently and in the future as well as various geographic features and accessibility. The gravity model included the identification of discrete market areas and encompasses parts of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, and New York. Using our GIS software and CLARITAS database<sup>4</sup>, the adult population (21 and over), latitude and longitude, and average household income is collected for each postal code.

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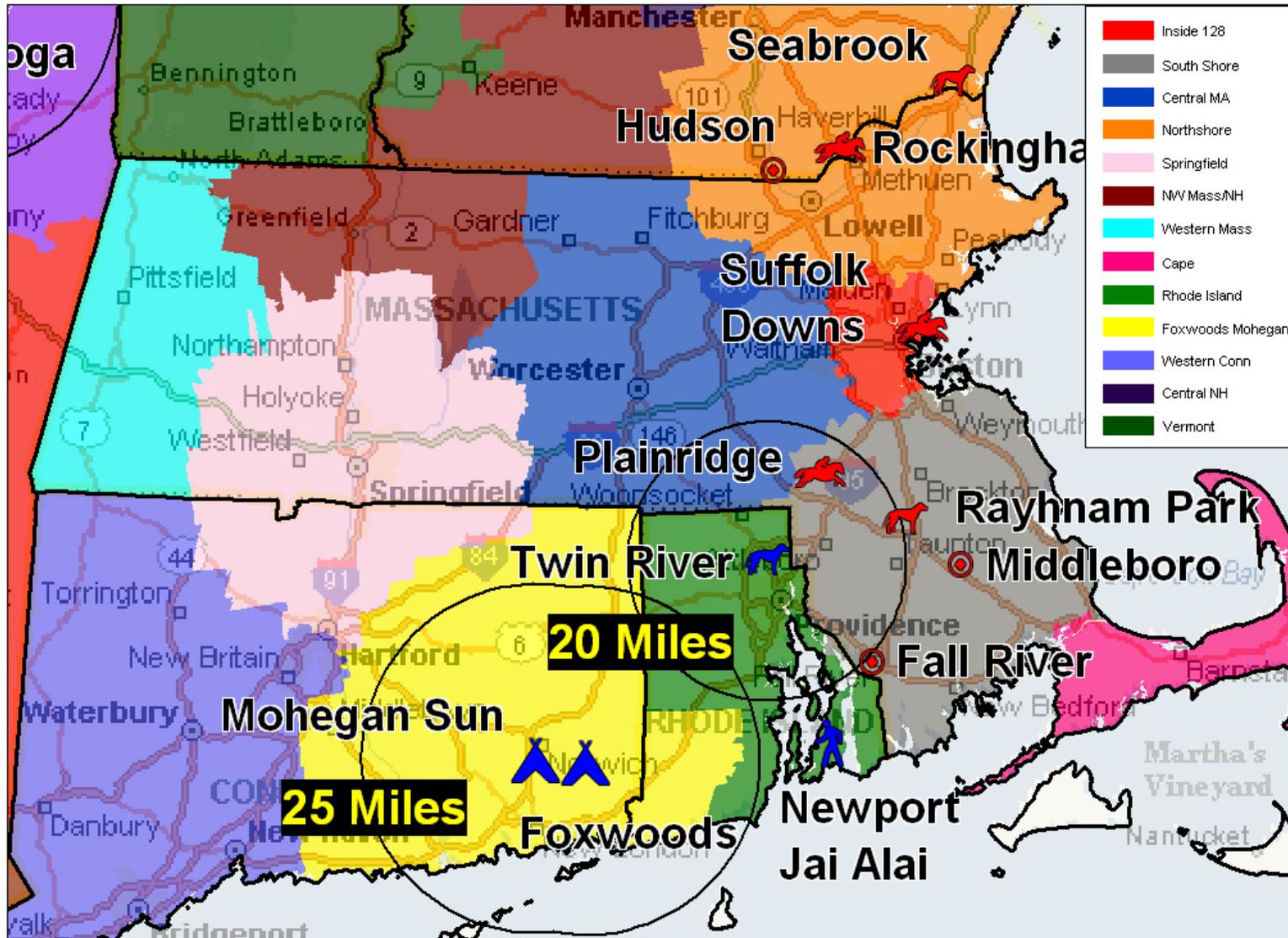
<sup>4</sup>The GIS software used was MapInfo. This software allows for custom data generally in a tabular format with a geographic identification code (census tract, zip code, latitude and longitude, or similar identifier) to be mapped or displayed and integrated with other geographic census based information such as location of specific population or roadways. MapInfo is one of the most widely used programs in the geographic information systems industry. CLARITAS is a vendor of demographic information located in the United States. CLARITAS provides census demographic and psychographic data on a variety of geographic levels of detail ranging from census block groups and counties to postal zip codes. Their information is updated every six months and includes a current year estimate and provides a five year forecast for the future. The Innovation Group has utilized this data for inputs to its models for the last six years and has purchased full access to their demographic database for the entire United States.

The following market area maps and table show the discrete market areas and present the respective demographic data. The first map focuses on the broader region, showing the area and including the assumed Aqueduct facility as well as market areas that are not expected to contribute significant amounts of day trips to the proposed Massachusetts facilities but do play a part in the broader market area and will play a role as expansion is assumed. The second map focuses more specifically on Massachusetts.

# Massachusetts Market Carve



### Massachusetts Market Carve (Zoom)



In total, The Innovation Group estimated that about 16.3 million gamer adults (21+) will live in the local market area in 2010 and is expected to reach approximately 16.7 million by 2014; reflecting an average growth rate of 0.62% per year. This growth rate is below the national average of about 1.15%.

### Market Carveout Adult (21+) Population

	2009	2010	2011	2012	2013	2014	A.A.G. 2009-2014
Rhode Island	849,995	851,800	853,609	855,421	857,238	859,058	0.21%
Central MA	903,683	909,158	914,666	920,207	925,782	931,391	0.61%
Inside 128	1,285,300	1,288,616	1,291,940	1,295,273	1,298,615	1,301,965	0.26%
South Shore	1,069,738	1,075,206	1,080,702	1,086,227	1,091,779	1,097,360	0.51%
Foxwoods Mohegan	633,238	638,506	643,818	649,174	654,574	660,020	0.83%
Springfield	737,554	741,482	745,431	749,401	753,393	757,405	0.53%
NW Mass NH	122,846	124,060	125,286	126,523	127,774	129,036	0.99%
Northshore	1,330,518	1,339,383	1,348,308	1,357,292	1,366,336	1,375,440	0.67%
W Conn	3,351,163	3,367,510	3,383,937	3,400,443	3,417,031	3,433,699	0.49%
Western Mass	103,042	102,934	102,826	102,719	102,611	102,504	-0.10%
Vermont	170,145	170,835	171,529	172,225	172,923	173,625	0.41%
Central NH	241,181	244,283	247,425	250,608	253,831	257,096	1.29%
South East NY	1,032,908	1,043,552	1,054,306	1,065,171	1,076,147	1,087,237	1.03%
Eastern NY	813,264	819,444	825,672	831,946	838,269	844,639	0.76%
Second East NY	1,034,538	1,045,211	1,055,995	1,066,889	1,077,896	1,089,017	1.03%
Saratoga	608,944	613,415	617,919	622,455	627,025	631,629	0.73%
NH Vermont	265,578	266,995	268,420	269,853	271,293	272,741	0.53%
Cape	192,061	192,447	192,834	193,221	193,610	193,999	0.20%
Maine Coast	773,066	779,395	785,776	792,209	798,694	805,233	0.82%
Central Maine	700,684	705,106	709,556	714,035	718,541	723,076	0.63%
<b>Total</b>	<b>16,219,446</b>	<b>16,319,548</b>	<b>16,420,267</b>	<b>16,521,608</b>	<b>16,623,574</b>	<b>16,726,170</b>	<b>0.62%</b>

Source: Claritas, MapInfo, The Innovation Group

The Innovation Group also analyzed average annual household income (“AAHI”) statistics for the local market. In total, AAHI was estimated at over \$84,800 in 2010 and is expected to reach nearly \$92,400 by 2014, reflecting an average annual increase of 2.15%. The income level is well above the national average of nearly \$69,400 in 2009. The expected growth rate for the area is just above the national average of 2%.

### Average Annual Household Incomes

	2009	2010	2011	2012	2013	2014	A.A.G. 2009-2014
Rhode Island	\$68,764	\$70,371	\$72,016.182	\$73,699	\$75,422	\$77,185	2.34%
Central MA	\$97,248	\$99,396	\$101,592	\$103,836	\$106,129	\$108,473	2.21%
Inside 128	\$84,985	\$86,784	\$88,621	\$90,498	\$92,414	\$94,371	2.12%
South Shore	\$82,524	\$84,470	\$86,463	\$88,503	\$90,591	\$92,728	2.36%
Foxwoods Mohegan	\$85,250	\$87,130	\$89,051	\$91,015	\$93,022	\$95,073	2.21%
Springfield	\$70,887	\$72,273	\$73,687	\$75,128	\$76,597	\$78,095	1.96%
NW Mass NH	\$67,945	\$69,547	\$71,187	\$72,866	\$74,585	\$76,343	2.36%
Northshore	\$88,455	\$90,427	\$92,444	\$94,505	\$96,612	\$98,766	2.23%
W Conn	\$94,244	\$96,078	\$97,948	\$99,855	\$101,799	\$103,780	1.95%
Western Mass	\$64,223	\$65,521	\$66,845	\$68,196	\$69,574	\$70,980	2.02%
Vermont	\$66,555	\$68,113	\$69,708	\$71,340	\$73,011	\$74,720	2.34%
Central NH	\$72,488	\$74,207	\$75,967	\$77,769	\$79,613	\$81,502	2.37%
South East NY	\$90,916	\$92,902	\$94,932	\$97,006	\$99,126	\$101,291	2.18%
Eastern NY	\$80,409	\$82,204	\$84,039	\$85,916	\$87,834	\$89,795	2.23%
Second East NY	\$91,032	\$93,020	\$95,051	\$97,126	\$99,246	\$101,413	2.18%
Saratoga	\$68,211	\$69,765	\$71,354	\$72,979	\$74,641	\$76,341	2.28%
NH Vermont	\$62,864	\$64,273	\$65,713	\$67,186	\$68,692	\$70,231	2.24%
Cape	\$76,335	\$78,130	\$79,968	\$81,849	\$83,775	\$85,745	2.35%
Maine Coast	\$69,132	\$70,635	\$72,170	\$73,738	\$75,341	\$76,978	2.17%
Central Maine	\$56,786	\$57,999	\$59,238	\$60,503	\$61,795	\$63,114	2.14%
<b>Average</b>	<b>\$83,048</b>	<b>\$84,836</b>	<b>\$86,662</b>	<b>\$88,527</b>	<b>\$90,433</b>	<b>\$92,379</b>	<b>2.15%</b>

Source: Claritas, MapInfo, The Innovation Group

## Calibration

To ensure that the model accurately represents the dynamics of the market, it is calibrated to mirror estimated revenues at each existing facility and the distribution pattern of gamer visits among the geographical market segments as derived in from the analysis of existing visitation patterns. The calibration includes the recent economic challenges in the United States due to turmoil in financial markets, subsequent government intervention in the financial markets, declining home values, and increasing unemployment. This calibration is therefore considered to be conservative and a sound foundation on which a modest and slow recovery is forecasted. Should an economic recovery take place during the forecasted period it is possible that revenue will be higher than forecasted.

Calibration entails adjusting the total number of gamer visits by changing propensity and frequency factors until the universe of gamer visits approaches that which is required to generate observed regional revenues. Propensity and frequency factors are based on research presented earlier in this report including data from the Harrah's survey as well as the implied gaming behavior as indicated in Mohegan Sun's public presentations and data made available by the University of Massachusetts as well as The Innovation Group's experience in this and other markets. Once this is accomplished, an iterative process of adjustments is made to attractions factors and friction factors. Attraction factors refer to the overall attraction value of the casino and incorporate such elements as the presence

and size of amenities, location, access, and gaming type. Friction factors work at the individual geographic market level making it harder or easier for gamer visits from a market to accrue to a specific casino venue. These reflect the observed patterns of visitation and account for elements such as database visitation patterns, geographic and ease of access, congestion, speed of travel, and other idiosyncrasies of the market place. Average win is based on several indicators of wealth including reported income levels, estimates of cost of living, and current gaming win levels at casinos in region. Estimates of gaming behavior and win are presented in the following table.

<b>North East Calibrated Regional Market Factors</b>			
<b>Market Segment</b>	<b>Propensity</b>	<b>Frequency</b>	<b>Average Win</b>
Rhode Island	41.0%	12.50	\$80
Central MA	33.0%	7.50	\$100
Inside 128	24.0%	5.00	\$90
South Shore	36.0%	8.00	\$87
Foxwoods Mohegan	39.0%	9.00	\$85
Springfield	28.0%	6.00	\$83
NW Mass NH	18.0%	3.00	\$85
Northshore	23.0%	5.00	\$93
W Conn	25.0%	5.50	\$100
Western Mass	23.0%	5.00	\$80
Vermont	12.0%	3.00	\$80
Central NH	19.0%	4.00	\$85
South East NY	27.0%	8.00	\$105
Eastern NY	24.0%	6.00	\$85
Second East NY	24.0%	6.00	\$95
Saratoga	35.0%	10.00	\$77
NH Vermont	12.0%	3.00	\$80
Cape	17.0%	3.50	\$87
Maine Coast	19.0%	4.00	\$83
Central Maine	25.0%	6.00	\$55

Source: The Innovation Group

Based on The Innovation Group’s experience in the region and public reports from the MSTGA, visitation and gross gaming revenue comes from both residents of the region accounted for in our local market carve and tourists or visitors from other regions. As such, and in the case of each facility, the carve accounts for the vast majority, but not all of the gross gaming revenue for each facility. In each case the model accounts for a minimum of 90% of gross gaming revenue, while existing tourists and guests staying in subject hotels account the remainder of total potential revenues.

### ***Local Market Revenue Analysis***

In the revenue analysis a baseline case is first established from which to gauge the recapture of Massachusetts gamers that are currently leaving the Commonwealth to play at other regional casinos. After that various competitive scenarios will be defined and evaluated relative to that baseline case.

## Baseline Case

The baseline case forecasts the assumed changes in the market place that would take place in the absence of the proposed legislation in Massachusetts including population growth within market areas, growth in income, and increases in gaming behavior. While increased gaming behavior would not exist in a mature market (in the absence of the introduction of additional supply), comparisons to previous research conducted by The Innovation Group and third parties indicates that gaming behavior in the market areas (and across the United States) has contracted. This includes lower propensities and frequencies in Massachusetts, which is consistent with declining revenue levels in southern New England, where both lower visitation and lower average spending metrics are contributing to lower revenue.

Another factor in our analysis is related to broader economic and demographic trends. Long-term trends support the theory for additional growth in the market, but the depth and severity of the recent economic recession has created a much dimmer view for the short term. For example, long-term, the overall growth in the Baby Boomer segment of the market will offset the recent recession. This is because the size of the population reaching ages that strongly coincide with the profile of casino gaming customers and increased acceptance of casino gaming as a form of entertainment will be much more dramatic than the temporary effects of a slow recovery from a deep recession. Moreover, the economic recession, while severe, will ultimately cede and long-term growth will resume. These trends and the assumption that an economic recovery continues at a moderate pace led to modest increases in gaming behavior in regions that previously displayed higher rates of play and slight increases in average gaming budgets, as shown in the following table.

<b>North East Baseline Regional Market Factors</b>			
<b>Market Segment</b>	<b>Propensity</b>	<b>Frequency</b>	<b>Average Win</b>
Rhode Island	42.0%	14.0	\$87
Central MA	34.0%	7.5	\$108
Inside 128	25.0%	5.0	\$97
South Shore	38.0%	9.0	\$94
Foxwoods Mohegan	40.0%	9.5	\$92
Springfield	28.0%	6.0	\$90
NW Mass NH	18.0%	3.0	\$92
Northshore	23.0%	5.0	\$101
W Conn	25.0%	5.5	\$108
Western Mass	23.0%	5.0	\$87
Vermont	12.0%	3.0	\$87
Central NH	19.0%	4.0	\$92
South East NY	28.0%	9.0	\$114
Eastern NY	24.0%	6.0	\$92
Second East NY	24.0%	6.0	\$103
Saratoga	35.0%	10.0	\$83
NH Vermont	12.0%	3.0	\$87
Cape	17.0%	3.5	\$94
Maine Coast	24.0%	6.0	\$90
Central Maine	28.0%	6.5	\$59

Source: The Innovation Group

Outside of the New York area, where increases in gaming behavior are related to the introduction of the Aqueduct facility, modest increases are forecasted in the Central Sites, South Shore, and Foxwoods Mohegan markets due to historical performance, proximity to existing facilities, and economic conditions.

The baseline case led to a forecasted \$1.1 billion in gross gaming revenue originating in Massachusetts and accruing in the regional market in the absence of casino gaming options located in the state. The potential recapture of that revenue is detailed under various competitive assumptions in the following sections and is presented as a percentage. **It is important to note that, as facilities are introduced in Massachusetts, gaming behavior will increase. Therefore, the gross gaming revenue originating in Massachusetts will climb above \$1.1 billion and the percentage of revenue recaptured can climb above 100%.**

### Local Market Forecasts for Scenarios 1 and 2

As mentioned previously, gaming behavior defined by propensity and frequency rise when new gaming supply is introduced in underdeveloped markets. While gaming behavior is relatively high in Massachusetts due to the extensive market efforts undertaken by Native American facilities in Connecticut and the proximity of the Rhode Island facilities, more proximate supply is expected to lead to some increases. This increase is forecasted for two reasons. First is the recent decline in gaming behavior that is associated with a challenging economic environment. During a gradual economic recovery, as forecasted by many economists and assumed in this analysis, a return to previous levels of gaming behavior will be hastened by the introduction of new supply. The second reason is that while gaming behavior in Massachusetts is high relative to comparable markets in other jurisdictions, other markets with much more accessible options demonstrate even higher propensities and frequencies, consistent with other jurisdictions where gaming is in close proximity to gamer populations. However, even with increased gaming behavior, the share of wallet attracted by out-of-state facilities for residents of Massachusetts is expected to decline simply based on convenience.

These factors were taken into consideration in developing estimates of gaming behavior in Massachusetts assuming casino gaming is permitted. Gaming participation rates for each of the defined market areas in the region are dependent on the quantity and accessibility of casinos within a day-trip distance of the market area. In addition, it was assumed that the building plan for each proposed facility would be based on the aforementioned assumptions, which are in turn based on The Innovation Group's experience as to what a reasonable development plan would consist of relative to each market opportunity.

Scenario 1 includes two facilities in two of the three defined regions and Scenario 2 adds a property in the third region. The two regions selected for Scenario 1 were regions 1 and 2, essentially the eastern part of the state. The two regions are the two largest in terms of population, but more importantly are densely populated, developed gaming markets with extensive transportation network that will enable the proposed casino facilities to achieve higher levels of revenue and employment when compared to Region 3.

The assumed propensities, frequencies, and average win for the local market increase with the size and proximity of gaming options. Slight variances in gaming behavior for specific regions are assumed as discussed in the Major Assumptions section of this report.

The forecasted gross gaming revenue from the local market for the first full year of operations is shown in the following table. With two facilities located in the eastern part of the state (Scenario 1), it was forecasted that demand would support approximately 9,000 to 11,000 gaming positions<sup>5</sup> generating gross gaming revenue from the local market between \$900.0 million and \$1.15 billion, as shown in the following table. Between \$549 million and \$721 million of this revenue is expected to be generated by residents of Massachusetts. Compared to the baseline case, in which Massachusetts residents were estimated to wager \$1.13 billion in regional casinos in 2016, this represents between 49% and 64% of gross gaming revenue being recaptured in the Commonwealth.

Scenario 2 includes the same assumptions used in Scenario 1 with the exception of an additional facility located in Region 3. Region 3 is somewhat isolated from Regions 1 and 2, leading to cannibalization of approximately \$40 million from the forecasted revenue in Scenario 1. Between 12,610 and 15,410 gaming positions are forecasted to generate between \$1.21 and \$1.51 billion in gross gaming revenue from the local market. Compared to the baseline scenario, this represents a recapture of between 60.0% and 79.0% of revenue that Massachusetts residents would have contributed to casino gaming facilities in surrounding states.

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<sup>5</sup> Gaming positions measures the number of players that can be accommodated at any one time and is calculated by adding the number of slot machines to 6 positions per table.

### **Revenue Estimates for Scenarios 1 and 2, First Full Year of Operations**

	Region 1	Region 2	Region 3	Total
<b>Scenario 1 High</b>				
Revenue (\$M)	\$541.1	\$610.3		\$1,151.4
Positions	5,250	5,550		10,800
Revenue/Position/Day	\$282	\$301		\$292
Revenue from MA (\$M)	\$351.2	\$369.6		\$720.8
Recaptured Revenue				63.7%
<b>Scenario 1 Low</b>				
Revenue (\$M)	\$451.1	\$448.5		\$899.6
Positions	4,500	4,250		8,750
Revenue/Position/Day	\$275	\$289		\$282
Revenue from MA (\$M)	\$276.9	\$271.9		\$548.8
Recaptured Revenue				48.5%
<b>Scenario 2 High</b>				
Revenue (\$M)	\$519.6	\$587.0	\$403.7	\$1,510.4
Positions	5,250	5,550	4,340	15,140
Revenue/Position/Day	\$271	\$290	\$255	\$273
Revenue from MA (\$M)	\$339.7	\$359.4	\$195.7	\$894.8
Recaptured Revenue				79.0%
<b>Scenario 2 Low</b>				
Revenue (\$M)	\$430.0	\$431.4	\$347.3	\$1,208.7
Positions	4,500	4,250	3,860	12,610
Revenue/Position/Day	\$262	\$278	\$246	\$263
Revenue from MA (\$M)	\$264.8	\$262.0	\$153.0	\$679.8
Recaptured Revenue				60.0%

Source: The Innovation Group

### **Local Market for Scenario 3**

Scenario 3 builds on Scenario 2 by adding a second casino resort in Region 2. Scenario 3A assumes that the second Region 2 facility is a commercial property, while Scenarios 3B and 3C assume that the second Region 2 facility is located on sovereign land owned by a Native American tribe paying revenue sharing of 18% and 0%, respectively.

In our research, The Innovation Group uncovered no known examples of casino resort properties that operated on both a commercial and sovereign basis. Federal regulations dictate that Native American facilities are not permitted to pay taxes, but they are permitted to engage in revenue sharing in order to offset the impacts of casino gaming on the surrounding community (increased infrastructure needs, emergency services, etc.). The goal of deterring excessive revenue sharing is to channel funds towards Native American tribes for the benefit of their membership, and there is no evidence to suggest that any savings related to the difference between gaming taxes and revenue sharing would be reinvested in capital expenditures or ongoing operations.

For the purposes of Scenario 3B, revenue sharing was assumed to be equal to 18% of Adjusted Gross Gaming Revenue, consistent with the effective rate of revenue sharing

for combined slot and table play in Connecticut. The Seneca in New York also pay between 18% and 22% of slot revenue in their revenue sharing agreement. Compared to a 32% effective tax rate (25% gross gaming tax plus other fees to offset expenses) assumed for commercial properties in Massachusetts, this represents a savings of 14% of gross gaming revenue. Scenario 3C assumes a 0% revenue sharing agreement, meaning that the Native American tribe would pay no gaming taxes or revenue sharing to the Commonwealth. The Innovation Group has assumed that these savings are optimized between the following competing interests:

- Capital investment in property, plant, and equipment; and
- Marketing and promotional expenditures measured to earn a return on investment; and
- Distributions of funds to the Tribe.

Any expenditure of what would be a dollar in earnings must lead to more than a dollar in additional earnings. Incremental earnings are generally measured on an earnings before interest, taxes, depreciation, and amortization (“EBITDA”) basis. The last dollar earned generally does not lead to a change in fixed costs and only marginal changes in variable operating expenses. In other words, with revenue sharing assumed to be 18%, an operator would reinvest \$1 so long as it generated \$1.18 (to cover revenue sharing) plus incremental costs associated with operations to generate that dollar. For example, if incremental costs inclusive of player rewards and operations were assumed to be 20%, the break-even would be \$1.38 for each dollar reinvested. The \$0.38 would offset revenue sharing and expenses associated with generating the dollar, with revenue beyond \$1.38 representing the return on investment.

The operator’s decision as to how to invest funds not earmarked for distributions is complex due to timing. Investments in physical plant and property are largely made years in advance of opening and in this case with some knowledge of the competitive environment. Competing amenities, branding, and sizing concerns in addition to investments in furniture, fixtures, and equipment (referred to as FF&E) are all taken into consideration and subject to rigorous financial analyses due to financing considerations. Marketing and promotional expenditures, in contrast, are more near-term in nature and can be tested on customer segments and honed to perform under specific competitive pressures.

Due to the extensive marketing expenditures already being undertaken in the region, and the extent to which those expenditures will be expected to grow, the assumed incremental marketing expenditures due to a shift from a commercial facility to a Native American facility are not expected to lead to increased gaming behavior. In other words, the incremental expenditures will not have a material influence in driving growth in the market but will rather lead to a higher investment in facilities and more aggressive marketing and player rewards that will ultimately lead to greater market share. Therefore, the estimated propensities, frequencies, and average win do not change between Scenarios 3A, 3B, and 3C.

When forecasting Scenario 3C these assumptions continue to hold true, but the return on expenditures diminishes. In other words, under the current assumptions the market starts to reach a point of saturation.

Due to competition from the second facility in Region 2, Scenario 3A leads to some decline in all three of the assumed casino locations from Scenario 2. This is largely due to the additional facility's ability to compete both for additional revenue that would otherwise be headed out of state as well as its ability to attract some revenue originating in neighboring states, particularly nearby Rhode Island. Forecasted gross gaming revenue generated by the local market in Scenario 3A is expected to range from \$1.41 to \$1.74 billion generated by between 16,300 and 19,140 gaming positions. Compared to the baseline scenario, this represents a recapture of between 70.4% and 92.6% of revenue that Massachusetts residents would have contributed to casino gaming facilities in surrounding states.

In Scenario 3B it is assumed that savings related to the decline in the effective gaming tax from 32% to a revenue sharing agreement of 18% leads to some reinvestment in facilities and marketing and promotional activities. The subsequent changes lead to some incremental growth at the Native American facility at the expense of all other facilities in the market including those located in Massachusetts. In aggregate, however, higher growth in gross gaming revenue accumulating within Massachusetts increases by approximately \$21 million in both the high and low cases. In Scenario 3C, with further diminishing returns on investment, incremental revenue is in the \$7 to \$8 million statewide. **In each of these cases, the taxable revenue at commercial facilities diminishes as revenue levels decline at those properties.**

## Revenue Estimates for Scenario 3, First Full Year of Operations

	Region 1	Region 2	Region 3	Second Region 2 Facility <sup>1</sup>	Total
<b>Scenario 3A High</b>					
Revenue (\$M)	\$485.2	\$540.8	\$392.8	\$372.3	\$1,791.2
Positions	5,250	5,550	4,340	4,000	19,140
Revenue/Position/Day	\$253	\$267	\$248	\$255	\$256
Revenue from MA (\$M)	\$316.0	\$327.5	\$188.4	\$267.5	\$1,099.3
Recaptured Revenue					97.1%
<b>Scenario 3A Low</b>					
Revenue (\$M)	\$394.4	\$400.1	\$331.4	\$338.9	\$1,464.8
Positions	4,500	4,000	3,860	4,000	16,360
Revenue/Position/Day	\$240	\$274	\$235	\$232	\$245
Revenue from MA (\$M)	\$241.3	\$244.5	\$142.9	\$221.0	\$849.8
Recaptured Revenue					75.0%
<b>Scenario 3B High</b>					
Revenue (\$M)	\$479.7	\$532.1	\$391.1	\$408.6	\$1,811.4
Positions	5,250	5,550	4,340	4,000	19,140
Revenue/Position/Day	\$250	\$263	\$247	\$280	\$259
Revenue from MA (\$M)	\$312.3	\$321.2	\$187.1	\$292.6	\$1,113.2
Recaptured Revenue					98.3%
<b>Scenario 3B Low</b>					
Revenue (\$M)	\$387.3	\$411.6	\$328.9	\$368.0	\$1,495.8
Positions	4,500	4,250	3,860	4,000	16,610
Revenue/Position/Day	\$236	\$265	\$233	\$252	\$247
Revenue from MA (\$M)	\$236.8	\$250.8	\$141.4	\$239.5	\$868.5
Recaptured Revenue					76.7%
<b>Scenario 3C High</b>					
Revenue (\$M)	\$477.7	\$528.8	\$390.4	\$422.1	\$1,818.9
Positions	5,250	5,550	4,340	4,000	19,140
Revenue/Position/Day	\$249	\$261	\$246	\$289	\$260
Revenue from MA (\$M)	\$310.9	\$318.9	\$186.6	\$302.0	\$1,118.3
Recaptured Revenue					98.8%
<b>Scenario 3C Low</b>					
Revenue (\$M)	\$385.6	\$409.0	\$328.4	\$380.0	\$1,503.1
Positions	4,500	4,250	3,860	4,000	16,610
Revenue/Position/Day	\$235	\$264	\$233	\$260	\$248
Revenue from MA (\$M)	\$235.8	\$249.1	\$141.1	\$247.2	\$873.1
Recaptured Revenue					77.1%

Source: The Innovation Group

1) Assumed to be a commercial facility in Scenario 3A, a Native American facility subject to 18% revenue sharing in Scenario 3B, and a Native American facility subject to 0% revenue sharing in Scenario 3C

## Local Market for Scenario 4

Scenario 4 builds on Scenario 2 by adding slot machines at horse tracks and former dog track locations. Scenario 4A assumes that 750 slot machines are permitted at each the Raynham and Plainridge facility, and 1,500 at the Suffolk facility, Scenario 4B assumes that 1,500 slot machines are permitted at the Raynham and Plainridge facility, and 3,000 at the Suffolk facility. The horse tracks are subject to a higher tax and revenue sharing structure which brings the effective tax rate to between 48% and 50% for each location. This will put the race facilities at a competitive disadvantage when compared to the casino resort locations in Massachusetts and at an advantage relative to the VLT product at the Rhode Island properties. The Suffolk Downs and Wonderland locations are assumed to combine their machine count at the Suffolk Downs location.

As noted in Scenario 3, extensive marketing expenditures are already being undertaken in the market and will grow substantially with the introduction of casino gaming within Massachusetts. Scenario 4A is assumed to lead to 750 machines each in Raynham and Plainridge and 1,500 machines at Suffolk Downs. Scenario 4B is assumed to double those machine counts. The incremental marketing expenditures made by these facilities at the proposed revenue sharing levels are not assumed to drive an increase in gaming behavior. Therefore, the estimated propensities, frequencies, and average win do not change between Scenarios 4A and 4B.

The more centrally located horse tracks and former dog track facilities are forecasted to generate higher revenue in the low cases in both Scenarios 4A and 4B. This is due to the less competitive locations selected within Regions 1 and 2 in the low scenario, making the making the aforementioned properties more centrally located and convenient to more densely populated areas. In other words, if relatively poor locations are chosen for the casino resorts, the existing horse tracks and former dog tracks will have advantages based on their locations alone and will perform better.

**The addition of horse tracks and former dog tracks brings forecasted revenue levels in Scenario 4 to levels comparable to Scenario 3. This is largely due to two factors. First, the overall number of slot machines being added to the market place is comparable by either the former and existing horse tracks and former dog tracks facilities or the second casino in Region 2 are comparable, particularly in Scenario 4A. Second, the higher tax rates applied to the race facilities and the lack of table games make them less competitive, making it more likely that a single casino resort could offset the revenue generated by three slot-only locations. The impact of different scenarios will be discussed in further detail in later sections of this report.**

Forecasted gross gaming revenue generated by the local market in Scenario 4A is expected to range from \$1.47 to \$1.77 billion generated by between 15,610 and 18,140 gaming positions. Compared to the baseline scenario, this represents a recapture of between 79.4% and 96.8% of revenue that Massachusetts residents would have contributed to casino gaming facilities in surrounding states. The additional positions in Scenario 4B lead to higher revenue levels. Gross gaming revenue for Scenario 4B is forecasted to range from \$1.59 billion to \$1.86 billion. Increased gaming behavior leads

to a rise in total gaming revenue originating in Massachusetts beyond the \$1.13 billion forecasted in the baseline case. This leads to a recapture, based on the baseline case, of between 87.1% and 102.8% of revenue originating in Massachusetts as forecasted in the baseline case.

### Revenue Estimates for Scenario 4, First Full Year of Operations

	Region 1	Region 2	Region 3	Suffolk Downs	Raynham	Plainridge	Total
<b>Scenario 4A High</b>							
Revenue (\$M)	\$490.7	\$562.0	\$400.0	\$153.0	\$79.8	\$80.9	\$1,766.3
Positions	5,250	5,550	4,340	1,500	750	750	18,140
Revenue/Position/Day	\$256	\$277	\$252	\$279	\$291	\$295	\$267
Revenue from MA (\$M)	\$317.1	\$339.2	\$192.8	\$126.4	\$60.1	\$60.1	\$1,095.7
Recaptured Revenue							96.8%
<b>Scenario 4A Low</b>							
Revenue (\$M)	\$389.2	\$392.7	\$340.5	\$164.4	\$92.3	\$93.4	\$1,472.4
Positions	4,500	4,250	3,860	1,500	750	750	15,610
Revenue/Position/Day	\$237	\$253	\$242	\$300	\$337	\$341	\$258
Revenue from MA (\$M)	\$235.7	\$234.3	\$147.5	\$136.8	\$72.2	\$72.2	\$898.8
Recaptured Revenue							79.4%
<b>Scenario 4B High</b>							
Revenue (\$M)	\$452.2	\$522.9	\$391.5	\$249.5	\$120.5	\$122.3	\$1,858.9
Positions	5,250	5,550	4,340	3,000	1,500	1,500	21,140
Revenue/Position/Day	\$236	\$258	\$247	\$228	\$220	\$223	\$241
Revenue from MA (\$M)	\$286.2	\$308.7	\$185.2	\$204.3	\$90.0	\$89.9	\$1,164.3
Recaptured Revenue							102.8%
<b>Scenario 4B Low</b>							
Revenue (\$M)	\$355.4	\$360.9	\$334.7	\$262.5	\$135.7	\$137.5	\$1,586.8
Positions	4,500	4,250	3,860	3,000	1,500	1,500	18,610
Revenue/Position/Day	\$216	\$233	\$238	\$240	\$248	\$251	\$234
Revenue from MA (\$M)	\$209.0	\$209.0	\$142.6	\$216.0	\$104.7	\$104.6	\$985.9
Recaptured Revenue							87.1%

Source: The Innovation Group

## *Tourism*

### **Methodology**

In addition to local market day-trip revenues, each of the proposed Destination Resorts would have the opportunity to supplement these revenues by capturing i) a portion of the existing tourists to Massachusetts and ii) new overnight guests induced to visit as a result of the presence of on-site hotels at each of the destination facilities.

In order to estimate the potential revenues for the tourism component in each scenario, The Innovation Group utilized a number of resources to gather a variety of data including the Massachusetts Office of Travel & Tourism (“MOTT”), Smith Travel Research (“STR”) Global, Claritas, GIS mapping software, and our experience and knowledge in the area. The discussion of our methodology for estimating these revenues has been segregated into two distinct segments, on-site tourists, made up of guests staying at the subject hotels, and off-site tourists staying at nearby hotels in and around the area. Each segment has its own distinct habits in terms of spending, purpose of visit, etc. We have assumed that the horse tracks and former dog tracks in contention for slots would not include hotels as the revenue generated from the slots would likely not be sufficient to finance the construction costs to build and operate a hotel.

### **Offsite Tourism**

In order to gain an understanding of the recent trends in tourism to Massachusetts, we first obtained a list of all area hotel rooms from STR Global, ensuring we captured the entire state of Massachusetts and surrounding areas. Using GIS mapping software, we then mapped that data by zip code in order to determine the number of hotels and hotel rooms by county and region. It should be noted that this list includes hotel rooms, but does not include Bed and Breakfasts and cottages for rent, therefore, areas more prone to that type of establishment, such as on Cape Cod, may appear to have fewer rooms than are actually available. Because only 2% of visitors stay at these types of establishments according to MOTT, and due to the Capes’ geographical location in relation to population densities, and the seasonality of visitation with both tourists and residents, we therefore concluded that the exclusion of Bed and Breakfasts and cottages is not expected to have a material effect on the overall analysis.

The map that follows illustrates the hotel locations in and around Massachusetts as well as the three regions being considered for gaming. Due to the vast number of hotels in and around the state, particularly in urban areas, on the map we have grouped the hotels by zip code for easier viewing. The color of the hotel point in each zip code corresponds to the range of hotel rooms in that zip code as denoted in the legend on the map that follows. To illustrate, as would be expected given the urban nature of the area, the area in Region 1 in and around Boston, has a concentration of hotel rooms, including numerous red points indicating zip codes that have between 330 and 1,990 hotel rooms, whereas more rural areas such as in Region 3 have lower concentrations of hotels and less overall hotel rooms in general.



MOTT also publishes statistical research pertaining to tourism in both their e-newsletter and TravelStats which comprises lodging, attractions, and airport data; lodging tax collections; and Massachusetts Tourism Fund receipts among many other statistics. According to MOTT, the data is “based on all travel – domestic and international, leisure and business, unless otherwise specified.” The following table summarizes numerous tourism statistics that we took into consideration when forecasting potential revenues from this segment of potential customers. It should be noted that in addition to MOTT’s data, we also considered industry standards based upon a variety of data that we have collected from other jurisdictions in terms of average length of stay and average occupancy. For the purposes of this study we have assumed an average occupancy per room of 1.5 persons and an average stay of 2.5 nights, and one visit per trip.

**Massachusetts Domestic Visitor  
Demographics**

Reason For Visit	Percent
Visit Friends/Relatives	46%
Personal	15%
Entertainment/Sightseeing	13%
Business	9%
Outdoor Recreation	5%
Combined Business/Leisure	9%
Convention/Seminar	4%
Applicable Leisure Percent	86%
<b>Hotel Usage Breakdown</b>	
Hotel/Motel Inn	46%
Private Home	41%
Condo/Timeshare	4%
RV/Tent	2%
Bed & Breakfast	2%
Other	5%
<b>Season Visited</b>	
Winter	3%
Spring	7%
Summer	53%
Fall	37%
<b>Statewide Occupancy</b>	
Average Occupancy	61.2%
<b>Average Length of Stay</b>	
Overnight Visitors	3.4
Overnight Stay and Day Trip Visitors Combined	2.1

Source: Massachusetts Office of Travel & Tourism

After geo-coding the area hotels, we applied county occupancy estimates obtained from MOTT as well as industry standards, to estimated the total overnight hotel visitors by county and by region. The table that follows details the hotel statistics by county and by region. The counties are highlighted to correspond to the region color in the previous map.

### Massachusetts Hotel Statistics by County and by Region

By County **	Hotels	Hotel Rooms	Average Rooms Per Hotel	Total Available Room Nights	Occupancy Rate *	Total Occupied Rooms *	Average Nights per Overnight trip *	Visitor Trips *	Visitors Per Trip *	Total Hotel Visitors *
Barnstable	243	11,067	46	4,039,455	51.0%	2,060,122	2.5	824,049	1.5	1,236,073
Berkshire	67	3,057	46	1,115,805	45.0%	502,112	2.5	200,845	1.5	301,267
Bristol	46	3,140	68	1,146,100	50.0%	573,050	2.5	229,220	1.5	343,830
Dukes	24	819	34	298,935	44.0%	131,531	2.5	52,613	1.5	78,919
Essex	82	5,629	69	2,054,585	58.0%	1,191,659	2.5	476,664	1.5	714,996
Franklin	9	508	56	185,420	47.0%	87,147	2.5	34,859	1.5	52,288
Hampden	41	3,750	91	1,368,750	52.0%	711,750	2.5	284,700	1.5	427,050
Hampshire	16	1,045	65	381,425	57.0%	217,412	2.5	86,965	1.5	130,447
Middlesex	126	17,275	137	6,305,375	63.0%	3,972,386	2.5	1,588,955	1.5	2,383,432
Nantucket	48	929	19	339,085	50.0%	169,543	2.5	67,817	1.5	101,726
Norfolk	55	5,198	95	1,897,270	66.0%	1,252,198	2.5	500,879	1.5	751,319
Plymouth	32	2,267	71	827,455	56.0%	463,375	2.5	185,350	1.5	278,025
Suffolk	88	19,796	225	7,225,540	76.0%	5,491,410	2.5	2,196,564	1.5	3,294,846
Worcester	73	5,894	81	2,151,310	53.0%	1,140,194	2.5	456,078	1.5	684,117
<b>By Region</b>										
Region 1	296	42,700	144	15,585,500	68.4%	10,655,456	2.5	4,262,182	1.5	6,393,274
Region 2	521	29,314	59	10,699,610	54.1%	5,790,013	2.5	2,316,005	1.5	3,474,008
Region 3	133	8,360	65	3,051,400	49.8%	1,518,422	2.5	607,369	1.5	911,053
<b>Total</b>	<b>950</b>	<b>80,374</b>	<b>1,103</b>	<b>29,336,510</b>	<b>61.2%</b>	<b>17,963,891</b>	<b>2.5</b>	<b>7,185,556</b>	<b>1.5</b>	<b>10,778,335</b>

Source: Massachusetts Office of Travel & Tourism, STR Global, The Innovation Group

\* Estimates

\*\* Region Identified by Color to relate to accompanying map.

\*\*\* Norfolk county is split between Region 1 & 2.

In determining tourism revenues, the individual scenarios were based on our local market analysis and considered the density of hotel rooms in different regions where casinos could be located. To recap, Scenario 1 includes two facilities in two of the three defined regions and Scenario 2 adds a property in the third region. The two regions selected for Scenario 1 were regions 1 and 2, essentially the eastern part of the state. In terms of tourism potential, these two regions have far more hotels and hotel rooms, at 42,700 and 29,300 hotel rooms respectively, compared to nearly 8,400 hotel rooms in Region 3, and therefore a greater ability to capture tourism visitation. Scenario 3 builds on Scenario 2 but adds an additional Native American casino in Region 2. Finally, Scenario 4 considers one casino in each region in addition to slot machines at Suffolk, Raynham and Plainridge.

Because some regions extend beyond county lines, to achieve a proper blended occupancy rate for the hotels proximate to a general casino location, the hotels were matched with the corresponding occupancy rate in their respective counties and geo-coded once again. This approach ensures that visitation to general areas that cross county lines are calculated properly, revealing an accurate estimate of tourist visitation. A general perimeter was cast to determine the number of hotel rooms and their corresponding occupancy rates, and therefore tourists in the area. A capture rate was then applied to each location based on various factors including access, proximity to the hotels, the transportation system, among many other factors. A win per visit of \$140 was estimated for this segment, reflecting a 35% premium to the local market average spend as determined in the local market section of this report based upon experiences in other jurisdictions and from facilities in other jurisdictions.

## Onsite Tourism

Because a full formal Hotel Market Assessment was not completed for this project, The Innovation Group had to rely on industry standards and our knowledge of the area, as well as items such as the access to the proposed facilities, transportation system, and the performance of other, similar facilities in order estimate on-site tourism revenues. It is our understanding that the total hotel room count would vary in each scenario depending on estimated demand that the area could support. The following table illustrates the hotel rooms contemplated for the various on-site hotel scenarios.

### Hotel Rooms Contemplated for the Various On-site Scenarios - 2016

Scenarios	Region 1	Region 2	Region 3	Total			
Scenario 1 High	2,000	2,000		4,000			
Scenario 1 Low	1,500	1,500		3,000			
Scenario 2 High	2,000	2,000	1,500	5,500			
Scenario 2 Low	1,500	1,500	1,500	4,500			
	Region 1	Region 2	Region 3	Region 2 - Native American	Total		
Scenario 3A High	2,000	2,000	1,500	1,500	7,000		
Scenario 3A Low	1,500	1,500	1,500	1,500	6,000		
Scenario 3B High	2,000	2,000	1,500	1,500	7,000		
Scenario 3B Low	1,500	1,500	1,500	1,500	6,000		
	Region 1	Region 2	Region 3	Suffolk Downs	Raynham	Plainridge	Total
Scenario 4A High	2,000	2,000	1,500				5,500
Scenario 4A Low	1,500	1,500	1,500				4,500
Scenario 4B High	2,000	2,000	1,500				5,500
Scenario 4B Low	1,500	1,500	1,500				4,300

A hotel as part of a Destination Casino Resort would be expected to be a key component of the facility, catering to the overnight gamer segment. The facility will likely include attractive amenities such as oversized rooms, a full-service spa, outdoor pool with deck area and fitness center that often accompany these types of properties. Consequently, patrons staying at the hotels would likely be valuable contributors of incremental gaming revenues.

The first step in estimating the potential impact on gaming revenues attributable to the overnight guests staying in the on-site hotels was to gain a thorough understanding of the existing hotel market in the region as reflected in the previous off-site tourist section of this report. Based on the information gathered in the aforementioned section, **The Innovation Group believes that in addition to growing and penetrating the overnight gamer segment, the proposed hotel would also capture a portion of the tourist market. Our experience shows that, given the amenities that often accompany casino hotels, these properties tend to achieve a higher occupancy than neighboring non-casino hotels.** This is due in part to the attractiveness of the facility, but also due to the casinos ability to market to casino gamers as a unique source of demand. Therefore we have assumed an occupancy rate of between 70% and 75% for each of the Destination Resorts based on the level of competition in the area. We used the same industry standards of 1.5 persons per room and an average stay of 2.5 nights, as was calculated in the off-site tourism section. We then estimated that approximately 75% of hotel guests would frequent the casino, again based upon statistics and data that we have gathered from comparable facilities.

Relative to local market gamers taking day trips or tourists staying in nearby hotels, guests of hotels located at casino resorts tend to have higher gaming budgets while on-site. This is due to a number of factors including the marketing efforts targeting premium players, the increased time available for gaming, and the value proposition offered to customers through

rewards programs and marketing efforts. Based on the performance of other regional casino hotels, approximately half of the overnight casino guests were assumed to be premium gamers that would be identified through a player rewards system (likely residents of the local market) or induced regional casino guests identified by the casino and hosted at the hotel. The other half are assumed to be overnight casino gamers with budgets commensurate with local market averages adjusted for increased win during an overnight stay. Each segment was assigned a win per visit based on a blended rate, with a premium given to premium players. The following table outlines the assumptions used in the on-site overnight guest segment.

**On-site Hotel Assumptions**

Casino Hotel Average Occupancy	70%-75%
Onsite Gaming Capture	75%
Average Nights per Overnight trip	2.5
Visitors Per Trip	1.5
Percentage Premium Gamer Visits	50%
On-site Overnight Gamer Win Per Visit	\$310
Overnight Premium Player Win Per Visit	\$360
Visits / Trip	1.1

The above methodology yielded gaming revenues for each scenario as shown in the section that follows.

**Total Gross Gaming Revenue Comparisons: First Full Year of Operations**

**Scenario 1 & 2**

As the following table shows, tourism revenue in Scenarios 1 and 2 comprises between approximately 15% and 17% of forecasted Gross Gaming Revenue. In each case, the on-site hotels and associated amenities are important elements, with revenue associated with the subject property’s hotel responsible for between 78% and 85% of all tourism revenue. Gross gaming revenue in Scenario 1 ranges from \$1.06 billion to \$1.38 billion from two casino resort facilities.

### Revenue Estimates for Scenarios 1 and 2, First Full Year of Operations

	Region 1	Region 2	Region 3	Total
<b>Scenario 1 High</b>				
Revenue (\$M)	\$541.1	\$610.3		\$1,151.4
Hotel Rooms	2,000	2,000		4,000
Onsite Hotel Revenue	\$90.8	\$90.8		\$181.6
Offsite Hotel Revenue	\$40.4	\$9.6		\$50.0
<b>Total Local Market and Tourist Revenue</b>	<b>\$672.3</b>	<b>\$710.7</b>		<b>\$1,382.9</b>
<b>Scenario 1 Low</b>				
Revenue (\$M)	\$451.1	\$448.5		\$899.6
Hotel Rooms	1,500	1,500		3,000
Onsite Hotel Revenue	\$68.1	\$68.1		\$136.2
Offsite Hotel Revenue	\$24.7	\$4.3		\$29.0
<b>Total Local Market and Tourist Revenue</b>	<b>\$543.9</b>	<b>\$520.9</b>		<b>\$1,064.7</b>
<b>Scenario 2 High</b>				
Revenue (\$M)	\$519.6	\$587.0	\$403.7	\$1,510.4
Hotel Rooms	2,000	2,000	1,500	5,500
Onsite Hotel Revenue	\$90.8	\$90.8	\$68.1	\$249.7
Offsite Hotel Revenue	\$38.3	\$7.5	\$5.9	\$51.8
<b>Total Local Market and Tourist Revenue</b>	<b>\$648.7</b>	<b>\$685.3</b>	<b>\$477.8</b>	<b>\$1,811.8</b>
<b>Scenario 2 Low</b>				
Revenue (\$M)	\$430.0	\$431.4	\$347.3	\$1,208.7
Hotel Rooms	1,500	1,500	1,500	4,500
Onsite Hotel Revenue	\$68.1	\$68.1	\$68.1	\$204.3
Offsite Hotel Revenue	\$24.7	\$4.3	\$6.9	\$35.8
<b>Total Local Market and Tourist Revenue</b>	<b>\$522.8</b>	<b>\$503.8</b>	<b>\$422.2</b>	<b>\$1,448.8</b>

The addition of a third facility in Region 3, as explored in Scenario 2, increases the overall potential state revenues from approximately \$1.38 billion (high case) in Scenario 1, to \$1.81 billion. This growth is primarily a function of new revenues attracted to the state by the location in Western Massachusetts, as it has only an approximately 3.5% negative impact on revenue levels on the existing facilities forecasted in Scenario 1. In the high scenario, the third regional casino generates an estimated \$477.8 million in gross gaming revenue while the two facilities experience a cumulative decline of \$48.9 million. To the extent that the two regions compete against one-another, that competition exists for customers that will likely live in markets considered secondary, in terms of distance, for all three casino resort locations. Similar impacts relate to the low range of revenue forecasts.

### Comparisons Between Scenario 1 & 2

	Region 1	Region 2	Region 3	Total
Scenario 1 High	\$672.3	\$710.7		\$1,382.9
Scenario 2 High	\$648.7	\$685.3	\$477.8	\$1,811.8
Difference	-\$23.6	-\$25.3	\$477.8	\$428.9
Percent Change	-3.5%	-3.6%		31%
Scenario 1 Low	\$543.9	\$520.9		\$1,064.7
Scenario 2 Low	\$522.8	\$503.8	\$422.2	\$1,448.8
Difference	-\$21.1	-\$17.1	\$422.2	\$384.1
Percent Change	-3.9%	-3.3%		36%

Source: The Innovation Group

It is important that while unlikely it is possible that the three casinos could be located within proximity (likely along the Interstate 90 corridor) where they could conceivably experience lower cumulative revenue as they compete for the same customers. This is generally considered unlikely in a controlled market environment, where both bidders and regulators would try to avoid this set of circumstances.

### Scenario 3

The following chart summarizes the forecasted revenue levels for Scenario 3 under the three different alternatives that were analyzed.

#### Revenue Estimates for Scenario 3, First Full Year of Operations

	Region 1	Region 2	Region 3	Region 2 Native American	Total
<b>Scenario 3A High</b>					
Revenue (\$M)	\$461.9	\$523.6	\$386.8	\$372.3	\$1,744.6
Hotel Rooms	2,000	2,000	1,500	1,500	7,000
Onsite Hotel Revenue	\$75.3	\$75.3	\$68.1	\$56.5	\$275.2
Offsite Hotel Revenue	\$40.4	\$9.6	\$4.7	\$5.7	\$60.4
<b>Total Local Market and Tourist Revenue</b>	<b>\$577.6</b>	<b>\$608.5</b>	<b>\$459.7</b>	<b>\$434.5</b>	<b>\$2,080.2</b>
<b>Scenario 3A Low</b>					
Revenue (\$M)	\$368.6	\$372.2	\$330.4	\$340.2	\$1,411.5
Hotel Rooms	1,500	1,500	1,500	1,500	6,000
Onsite Hotel Revenue	\$56.5	\$56.5	\$68.1	\$68.1	\$249.2
Offsite Hotel Revenue	\$24.7	\$2.9	\$6.8	\$4.4	\$38.8
<b>Total Local Market and Tourist Revenue</b>	<b>\$449.8</b>	<b>\$431.7</b>	<b>\$405.3</b>	<b>\$412.7</b>	<b>\$1,699.5</b>
<b>Scenario 3B High</b>					
Revenue (\$M)	\$456.6	\$515.0	\$385.2	\$408.3	\$1,765.1
Hotel Rooms	2,000	2,000	1,500	1,500	7,000
Onsite Hotel Revenue	\$75.3	\$75.3	\$68.1	\$62.5	\$281.3
Offsite Hotel Revenue	\$40.4	\$9.6	\$4.7	\$5.8	\$60.5
<b>Total Local Market and Tourist Revenue</b>	<b>\$572.4</b>	<b>\$599.9</b>	<b>\$458.0</b>	<b>\$476.7</b>	<b>\$2,106.9</b>
<b>Scenario 3B Low</b>					
Revenue (\$M)	\$364.4	\$366.2	\$329.1	\$372.5	\$1,432.2
Hotel Rooms	1,500	1,500	1,500	1,500	6,000
Onsite Hotel Revenue	\$56.5	\$56.5	\$68.1	\$70.4	\$251.4
Offsite Hotel Revenue	\$24.7	\$2.9	\$6.9	\$5.8	\$40.3
<b>Total Local Market and Tourist Revenue</b>	<b>\$445.6</b>	<b>\$425.6</b>	<b>\$404.1</b>	<b>\$448.7</b>	<b>\$1,724.0</b>
<b>Scenario 3C High</b>					
Revenue (\$M)	\$454.7	\$511.8	\$384.5	\$421.8	\$1,772.8
Hotel Rooms	2,000	2,000	1,500	1,500	6,000
Onsite Hotel Revenue	\$75.3	\$75.3	\$68.1	\$71.7	\$0.0
Offsite Hotel Revenue	\$40.4	\$9.6	\$4.7	\$5.8	\$0.0
<b>Total Local Market and Tourist Revenue</b>	<b>\$570.4</b>	<b>\$596.7</b>	<b>\$457.4</b>	<b>\$499.3</b>	<b>\$2,123.8</b>
<b>Scenario 3C Low</b>					
Revenue (\$M)	\$362.9	\$363.9	\$328.6	\$384.6	\$1,440.0
Hotel Rooms	1,500	1,500	1,500	1,500	6,000
Onsite Hotel Revenue	\$56.5	\$60.5	\$63.6	\$71.7	\$252.3
Offsite Hotel Revenue	\$24.7	\$2.9	\$6.9	\$5.8	\$40.3
<b>Total Local Market and Tourist Revenue</b>	<b>\$444.0</b>	<b>\$427.4</b>	<b>\$399.0</b>	<b>\$462.1</b>	<b>\$1,732.6</b>

Source: The Innovation Group

The following table shows the comparison of gaming revenues on an aggregate basis and by Destination Resort in each region and the effect that an additional fourth facility (Native American) would have on these properties if introduced at some point in time. For illustration purposes we have chosen Scenario 3B to complete the comparison, as the overall impacts between the three different alternatives under Scenario 3 are not materially different.

### Comparisons Between Scenario 2 & 3B

	Region 1	Region 2	Region 3	Region 2 Native American	Total
Scenario 2 High	\$648.7	\$685.3	\$477.8		\$1,811.8
Scenario 3B High	\$572.4	\$599.9	\$458.0	\$476.7	\$2,106.9
Difference	-\$76.4	-\$85.5	-\$19.8	\$476.7	\$295.1
Percent Change	-11.8%	-12.5%	-4.1%		16.3%
Scenario 2 Low	\$522.8	\$503.8	\$422.2		\$1,448.8
Scenario 3B Low	\$445.6	\$425.6	\$404.1	\$448.7	\$1,724.0
Difference	-\$77.2	-\$78.2	-\$18.2	\$448.7	\$275.2
Percent Change	-14.8%	-15.5%	-4.3%		19.0%

Source: The Innovation Group

As the table indicates, the addition of a fourth Destination Resort facility, while potentially growing the overall market revenues by approximately 16-19%, would materially negatively affect the revenue forecasts of the Destination Resorts in Regions 1 and 2. For example, in Scenario 3B Low Case, the estimated gaming revenue numbers for the Regions 1 and 2 fall by approximately 15% or over \$75 million at each facility. This reduction in revenue will affect both EBITDA and the level of investment in Destination Resorts. First, the impact of the revenue loss on EBITDA will be at a disproportionately high flow-through rate, meaning that while the EBITDA margin for Destination Resorts has been estimated in the 24% to 28% range in our analysis, with fixed costs largely covered, the margin on the lost revenue dollars could be much higher. Thus, the EBITDA loss on \$75 million in revenue could equate to as much as \$40-45 million in reduced EBITDA. Consequently, investors will be likely have to reduce the overall level of investment in a Destination Resort, in our estimation by as much as nearly \$200 million (assuming leverage at 4.0x EBITDA), meaningfully decreasing the scale and attractiveness of the resort.

In addition, the overall uncertainty created by the potential entrance of a Native American facility at some point in time, would likely contribute to the market risks for developers and further impair the ability of developers to attract the capital needed to build any large competitive facilities.

### Scenario 4

The following table summarizes the overall estimated gaming revenues to the Commonwealth based upon Scenarios 4A and 4B. As explained in the local market revenue discussion, due to locations more centrally located, the existing and former racing facilities have an advantage in the low case and are therefore projected to generate higher revenue in those scenarios.

**Revenue Estimates for Scenario 4, First Full Year of Operations**

	Region 1	Region 2	Region 3	Suffolk Downs	Raynham	Plainridge	Total
<b>Scenario 4A High</b>							
Revenue (\$M)	\$490.7	\$562.0	\$400.0	\$153.0	\$79.8	\$80.9	\$1,766.3
Hotel Rooms	2,000	2,000	1,500				5,500
Onsite Hotel Revenue	\$90.8	\$90.8	\$68.1				\$249.7
Offsite Hotel Revenue	\$28.1	\$8.5	\$4.7	\$15.1	\$0.6	\$1.0	\$58.0
<b>Total Local Market and Tourist Revenue</b>	<b>\$609.6</b>	<b>\$661.3</b>	<b>\$472.8</b>	<b>\$168.1</b>	<b>\$80.3</b>	<b>\$81.9</b>	<b>\$2,074.0</b>
<b>Scenario 4A Low</b>							
Revenue (\$M)	\$389.2	\$392.7	\$340.5	\$164.4	\$92.3	\$93.4	\$1,472.4
Hotel Rooms	1,500	1,500	1,500				4,500
Onsite Hotel Revenue	\$68.1	\$68.1	\$68.1				\$204.3
Offsite Hotel Revenue	\$24.7	\$4.3	\$6.8	\$20.2	\$0.6	\$1.8	\$58.3
<b>Total Local Market and Tourist Revenue</b>	<b>\$482.0</b>	<b>\$465.1</b>	<b>\$415.4</b>	<b>\$184.5</b>	<b>\$92.8</b>	<b>\$95.2</b>	<b>\$1,735.0</b>
<b>Scenario 4B High</b>							
Revenue (\$M)	\$452.2	\$522.9	\$391.5	\$249.5	\$120.5	\$122.3	\$1,858.9
Hotel Rooms	2,000	2,000	1,500				5,500
Onsite Hotel Revenue	\$90.8	\$90.8	\$68.1				\$249.7
Offsite Hotel Revenue	\$27.0	\$8.5	\$4.7	\$15.1	\$0.7	\$1.2	\$57.2
<b>Total Local Market and Tourist Revenue</b>	<b>\$570.0</b>	<b>\$622.2</b>	<b>\$464.3</b>	<b>\$264.6</b>	<b>\$121.2</b>	<b>\$123.5</b>	<b>\$2,165.9</b>
<b>Scenario 4B Low</b>							
Revenue (\$M)	\$355.4	\$360.9	\$334.7	\$262.5	\$135.7	\$137.5	\$1,586.8
Hotel Rooms	1,500	1,500	1,500				4,300
Onsite Hotel Revenue	\$68.1	\$59.0	\$68.1				\$195.2
Offsite Hotel Revenue	\$24.7	\$4.3	\$6.9	\$24.2	\$0.7	\$2.2	\$62.9
<b>Total Local Market and Tourist Revenue</b>	<b>\$448.2</b>	<b>\$424.2</b>	<b>\$409.7</b>	<b>\$286.7</b>	<b>\$136.4</b>	<b>\$139.7</b>	<b>\$1,844.9</b>

The following chart shows a similar comparison between Scenario 2 (one Destination Resort in each region) and Scenarios 4A (750 slot machines at each existing and former race facility). The numbers in Scenario 4A indicate that overall the market in Massachusetts could be expected to grow to over \$2 billion with the introduction of slots at each of the existing and former racetracks (1,500 slots at Suffolk Downs with the combination of the assumed allocation from Wonderland). With the increased number of facilities, there is also increased job creation. However, there are impacts on the forecasts for the three regional Destination Resorts, with the facility in Region 1 realizing the largest potential impact with forecasted revenues declining by approximately \$40 million or 6%.

The potential impact that the forecasted declines might have on the ability of developers and operators to raise the necessary capital to build competitive destination facilities and obtain appropriate returns is not as significant as is the impact of adding a fourth Destination Resort facility as was examined above for Scenario 3. However, the presence of slots at racetracks alone could create incremental material uncertainty and additional risk (in addition to the existing risk related to sovereign land being granted to a Native American tribe) to potential developers seeking capital and consequently impact the overall scope and size of potential development projects. Developers are likely to be hesitant to commit capital to the level they would without the presence of slots at tracks or may prefer to move forward on a phasing approach to developments. The tracks may have the advantage of being open earlier than Destination Resorts given the limited building program that they would pursue due to their limited revenue potential, thereby giving them somewhat of an initial competitive advantage.

There are a number of examples from other jurisdictions where racetracks have started with a modest number of slot machines and were successful in gaining legislation or regulatory approvals to increase their number of units over time. Such concerns about further dilution (and as demonstrated in Scenario 4B) could provide enough market uncertainty that the long term goals of the Commonwealth for the industry in Massachusetts could be impacted.

Should the Commonwealth decide to move forward in the presence of these risks in Scenario 4A, consideration should be given to providing developers of the proposed Destination Resorts (and consequently their financing sources), with the commitment that that the number of slot at the racetracks would not be increased meaningfully during the initial license period for the Destination Resorts.

Finally, under this situation, consideration needs to be given to the forecasted revenue numbers for the racetrack facilities, the potential EBITDA levels that can be achieved (see Section on EBITDA and capital), and the ultimate level of building or development that these modest EBITDA levels can support. The modest revenue numbers forecasted would result in EBITDA levels that are likely to not support significant development or refurbishment costs for several of the tracks.

### Comparisons Between Scenario 2 & 4A

	Region 1	Region 2	Region 3	Suffolk Downs	Raynham	Plainridge	Total
Scenario 2 High	\$648.7	\$685.3	\$477.8				\$1,811.8
Scenario 4A High	\$609.6	\$661.3	\$472.8	\$168.1	\$80.3	\$81.9	\$2,074.0
Difference	-\$39.1	-\$24.0	-\$5.0	\$168.1	\$80.3	\$81.9	\$262.2
Percent Change	-6.0%	-3.5%	-1.0%				14.5%
Scenario 2 Low	\$522.8	\$503.8	\$422.2				\$1,448.8
Scenario 4A Low	\$482.0	\$465.1	\$415.4	\$184.5	\$92.8	\$95.2	\$1,735.0
Difference	-\$40.8	-\$38.7	-\$6.8	\$184.5	\$92.8	\$95.2	\$286.2
Percent Change	-7.8%	-7.7%	-1.6%				19.8%

Source: The Innovation Group

The significant potential negative implications of implementing a scenario whereby the racetracks are granted permission to have up to 1,500 machines is demonstrated in the following chart that compares Scenario 2 with Scenario 4B. In this situation, the overall forecasted revenues to the Commonwealth are the highest of any of the scenarios analyzed. However, the potential negative impacts on the revenues of the Destination Resorts in Regions 1 and 2 are severe (approximately 15%). In addition to this level of decline, this scenario also introduces an additional level of uncertainty and risk such that development of competitive Destination Resorts would likely be curtailed.

### Comparisons Between Scenario 2 & 4B

	Region 1	Region 2	Region 3	Suffolk Downs	Raynham	Plainridge	Total
Scenario 2 High	\$648.7	\$685.3	\$477.8				\$1,811.8
Scenario 4B High	\$570.0	\$622.2	\$464.3	\$264.6	\$121.2	\$123.5	\$2,165.9
Difference	-\$78.8	-\$63.1	-\$13.4	\$264.6	\$121.2	\$123.5	\$354.0
Percent Change	-12.1%	-9.2%	-2.8%				19.5%
Scenario 2 Low	\$522.8	\$503.8	\$422.2				\$1,448.8
Scenario 4B Low	\$448.2	\$424.2	\$409.7	\$286.7	\$136.4	\$139.7	\$1,844.9
Difference	-\$74.6	-\$79.6	-\$12.5	\$286.7	\$136.4	\$139.7	\$396.1
Percent Change	-14.3%	-15.8%	-3.0%				27.3%

Source: The Innovation Group

# *Ramp-Up Period*

## **Gaming Revenue**

Using the revenue forecasts for the first stabilized year from the gaming revenue estimates section of our study (2016), estimates of revenues for the initial ramp-up period (2014-2015) were established. Typically, in the gaming industry, it will take 18 to 24 months for a property to achieve a stabilized level of revenue production. During this time, casino marketing and customer incentive programs are getting established, databases are being developed, and awareness is being created in an effort to draw customers and establish loyalty among gamers in the local market. This period also allows for advertising and promotional campaigns to be fine tuned while the property learns more about the gaming habits of the local market and establishes an interaction with the tourist market.

In estimating the ramp-up period for casinos in Massachusetts, a number of casinos in other markets were reviewed. In new markets where the local population base did not previously have easy access to casino gaming, annual growth during the first two years was extremely high. As markets mature and competition from both within the market and surrounding gaming jurisdictions encroaches on the subject properties, annual growth becomes much more normative.

Other factors include fluctuations in the number of games offered. Often casinos will open with less gaming positions and then expand as demand dictates.

The following table summarizes data from a number of other jurisdictions. The time period reviewed begins with the first full month of operations. Rhode Island and Connecticut properties exhibited extremely high growth during the first two years of operation given the lack of competition that was in the regional markets at the time. Mohegan Sun, while still showing significant growth during the first year, did not achieve the growth exhibited by Foxwoods almost four years earlier.

Michigan and Pennsylvania are more current examples that were used in the review. Many of the consumers in the Pennsylvania markets were relatively familiar with gaming due to their proximity to Atlantic City to the east and West Virginia to the west. The Detroit market already had easy access to a temporary casino that was opened in Windsor, Ontario in 1994 when the casinos opened the city in 1999.

### Comparative State Ramp-up Periods

	Period	Year 1	Year 2	Growth	Year 3	Growth
<b>Rhode Island</b>						
Twin River	Oct.'92-Sep.'95	\$15,668,637	\$26,460,345	68.9%	\$52,383,636	98.0%
Newport	Oct.'92-Sep.'95	\$6,097,953	\$7,650,407	25.5%	\$11,807,723	54.3%
<b>Connecticut</b>						
Foxwoods *	Feb.'93-Jan.'96	\$277,511,758	\$484,909,919	74.7%	\$577,858,477	19.2%
Mohegan *	Nov.'96-Oct.'99	\$330,117,993	\$420,846,684	27.5%	\$484,762,612	15.2%
<b>Detroit, MI</b>						
MGM Grand	Aug.'99-Jul.'02	\$405,698,773	\$365,344,888	-9.9%	\$395,760,801	8.3%
Motor City	Jan.'00-Dec.'02	\$315,746,974	\$361,034,768	14.3%	\$402,513,543	11.5%
Greektown	Dec.'00-Nov.'03	\$269,116,612	\$329,642,686	22.5%	\$326,500,122	-1.0%
Michigan Average		\$990,562,359	\$1,056,022,342	6.6%	\$1,124,774,466	6.5%
<b>Pennsylvania</b>						
Mohegan Sun	Dec.'06-Nov.'09	\$176,334,068	\$181,893,040	3.2%	\$219,909,722	20.9%
Philadelphia Park	Jan.'07-Dec.'09	\$285,032,169	\$345,502,693	21.2%	\$359,274,246	4.0%
Harrah's Chester Downs	Feb.'07-Jan.'10	\$304,955,991	\$326,820,531	7.2%	\$317,010,400	-3.0%
Presque Isle	Mar.'07-Feb.'10	\$163,919,047	\$166,744,745	1.7%	\$178,984,710	7.3%
Pennsylvania Average		\$930,241,275	\$1,020,961,009	9.8%	\$1,075,179,078	5.3%

Source: Various State Gaming Commission websites

\* Slot Win Only

The Massachusetts market is currently served by the Connecticut and Rhode Island properties so consumers are familiar with casino gaming. It is also assumed an effective advertising campaign targeted in key feeder markets will begin well in advance of all property openings. Player clubs and reward programs are expected to be developed and available at opening. The construction phase of each project also allows ample time to continually put forth the resort name in the public domain through public relations and the press. These tactics should allow for a more moderate ramp-up for properties in Massachusetts as experienced in markets such as Detroit and Pennsylvania. For Years 1 and 2 (2014 and 2015), gaming revenue estimates were developed by discounting the 2016 stabilized gaming revenue for each scenario to reflect growth of 9.7% for year one and 5.6% for year two. Normative growth is assumed to be 2.5% annually.

The ramp-up period for resort casinos and racetracks is expected to be similar.

It should be noted that even with a seamless gaming application and approval process; issues pertaining to development, financing and construction will likely impact the timing of resort openings. These factors would trigger adjustments to the ramp-up period for each property independently.

The following series of tables reflect gaming revenue for the first three years of operation taxes paid to the Commonwealth under each scenario examined.

## Scenario 2

Scenario 2 includes one Resort Casino per each of the three regions.

### Scenario 2- Gaming Revenue - Ramp-Up

	Year 1	Year 2	Growth	Year 3	Growth
HIGH					
Region 1	\$560,090,044	\$614,467,718	9.7%	\$648,724,294	5.6%
Region 2	\$591,691,261	\$649,137,015	9.7%	\$685,326,403	5.6%
Region 3	\$412,487,984	\$452,535,361	9.7%	\$477,764,207	5.6%
LOW					
Region 1	\$451,345,593	\$495,165,553	9.7%	\$522,771,033	5.6%
Region 2	\$434,965,932	\$477,195,635	9.7%	\$503,799,291	5.6%
Region 3	\$364,548,037	\$399,941,051	9.7%	\$422,237,764	5.6%

Source: The Innovation Group

### Scenario 3A

Scenario 3B includes one Resort Casino per each of the three regions plus an additional commercial resort license in the southeast region (Region 2) This second resort in the southeast region is assumed to pay a gaming tax equal to the other resorts at 27%:

### Scenario 3A - Gaming Revenue - Ramp-Up

	Year 1	Year 2	Growth	Year 3	Growth
HIGH					
Region 1	\$498,664,806	\$547,078,865	9.7%	\$577,578,512	5.6%
Region 2	\$525,337,354	\$576,340,980	9.7%	\$608,471,990	5.6%
Region 3	\$396,851,398	\$435,380,660	9.7%	\$459,653,131	5.6%
Region 2 - Commercial	\$375,159,408	\$411,582,651	9.7%	\$434,528,384	5.6%
LOW					
Region 1	\$388,340,869	\$426,043,866	9.7%	\$449,795,812	5.6%
Region 2	\$372,676,616	\$408,858,811	9.7%	\$431,652,690	5.6%
Region 3	\$349,965,157	\$383,942,357	9.7%	\$405,347,143	5.6%
Region 2 - Commercial	\$356,300,632	\$390,892,927	9.7%	\$412,685,207	5.6%

Source: The Innovation Group

### Scenario 3B

Scenario 3B includes one Resort Casino per each of the three regions plus an additional resort license designated as Native American in the southeast region (Region 2). In this scenario it is assumed the native American casino would pay an 18% gaming tax as discussed in the revenue section of the report. It is estimated that compact negotiations will delay the opening of a Native American run casino by one year. However, the ramp-up for a facility opening one year later than the other casinos in the region is expected to see a much smaller ramp-up and should be stabilized by the second year of operation. The reasoning behind this includes a local market population that will already have had a year to experience the other regional resorts. The opening of this resort will include a heavy marketing and advertising campaign such that the local market should be anticipating this resort.

### Scenario 3B - Gaming Revenue - Ramp-Up

	Year 1	Year 2	Growth	Year 3	Growth
<b>HIGH</b>					
Region 1	\$494,151,757	\$542,127,656	9.7%	\$572,351,273	5.6%
Region 2	\$517,899,565	\$568,181,076	9.7%	\$599,857,171	5.6%
Region 3	\$395,432,704	\$433,824,228	9.7%	\$458,009,929	5.6%
Region 2 - Native American		\$442,940,385		\$476,714,589	7.6%
<b>LOW</b>					
Region 1	\$384,734,359	\$422,087,209	9.7%	\$445,618,571	5.6%
Region 2	\$367,438,266	\$403,111,884	9.7%	\$425,585,372	5.6%
Region 3	\$348,869,834	\$382,740,692	9.7%	\$404,078,486	5.6%
Region 2 - Native American		\$416,905,736		\$448,694,798	7.6%

Source: The Innovation Group

### Scenario 3C

Scenario 3C includes one Resort Casino per each of the three regions plus an additional resort license designated as Native American in the southeast region (Region 2). In this scenario it is assumed the Native American casino would pay not pay a gaming tax.

### Scenario 3C - Gaming Revenue - Ramp-Up

	Year 1	Year 2	Growth	Year 3	Growth
<b>HIGH</b>					
Region 1	\$492,459,519	\$540,271,122	9.7%	\$570,391,237	5.6%
Region 2	\$515,137,152	\$565,150,468	9.7%	\$596,657,606	5.6%
Region 3	\$394,885,325	\$433,223,706	9.7%	\$457,375,928	5.6%
Region 2 - Native American		\$463,950,794		\$499,327,042	7.6%
<b>LOW</b>					
Region 1	\$383,380,026	\$420,601,387	9.7%	\$444,049,915	5.6%
Region 2	\$368,969,840	\$404,792,155	9.7%	\$427,359,318	5.6%
Region 3	\$344,519,987	\$377,968,529	9.7%	\$399,040,275	5.6%
Region 2 - Native American		\$429,399,489		\$462,141,200	7.6%

Source: The Innovation Group

### Scenario 4A

Scenario 4B includes one Resort Casino per each of the three regions plus four racetrack licenses that allow for up to 750 slot machines per license. This assumes Suffolk Downs and Wonderland combine licenses for one location:

### Scenario 4A - Gaming Revenue - Ramp-Up

	Year 1	Year 2	Growth	Year 3	Growth
<b>HIGH</b>					
Region 1	\$526,300,973	\$577,398,155	9.7%	\$609,588,102	5.6%
Region 2	\$570,928,318	\$626,358,252	9.7%	\$661,277,724	5.6%
Region 3	\$408,169,281	\$447,797,366	9.7%	\$472,762,069	5.6%
Suffolk Downs	\$145,166,488	\$159,260,322	9.7%	\$168,139,085	5.6%
Raynham	\$69,363,902	\$76,098,262	9.7%	\$80,340,740	5.6%
Plainridge	\$70,714,873	\$77,580,395	9.7%	\$81,905,501	5.6%
<b>LOW</b>					
Region 1	\$416,124,881	\$456,525,355	9.7%	\$481,976,644	5.6%
Region 2	\$401,554,781	\$440,540,682	9.7%	\$465,100,825	5.6%
Region 3	\$358,638,535	\$393,457,810	9.7%	\$415,393,083	5.6%
Suffolk Downs	\$159,309,914	\$174,776,896	9.7%	\$184,520,708	5.6%
Raynham	\$80,151,333	\$87,933,015	9.7%	\$92,835,281	5.6%
Plainridge	\$82,183,001	\$90,161,933	9.7%	\$95,188,461	5.6%

Source: The Innovation Group

### Scenario 4B

Scenario 4B includes one Resort Casino per each of the three regions plus four licenses that allow for up to 1,500 slot machines per license at the existing horse tracks and the former dog tracks. This assumes Suffolk Downs and Wonderland combine licenses for one location:

### Scenario 4B - Gaming Revenue - Ramp-Up

	Year 1	Year 2	Growth	Year 3	Growth
<b>HIGH</b>					
Region 1	\$492,088,344	\$539,863,912	9.7%	\$569,961,325	5.6%
Region 2	\$537,230,323	\$589,388,606	9.7%	\$622,247,021	5.6%
Region 3	\$400,891,122	\$439,812,590	9.7%	\$464,332,142	5.6%
Suffolk Downs	\$228,424,711	\$250,601,868	9.7%	\$264,572,922	5.6%
Raynham	\$104,663,950	\$114,825,499	9.7%	\$121,227,020	5.6%
Plainridge	\$106,640,042	\$116,993,444	9.7%	\$123,515,829	5.6%
<b>LOW</b>					
Region 1	\$386,933,007	\$424,499,319	9.7%	\$448,165,156	5.6%
Region 2	\$366,259,403	\$401,818,568	9.7%	\$424,219,953	5.6%
Region 3	\$353,721,239	\$388,063,107	9.7%	\$409,697,625	5.6%
Suffolk Downs	\$247,489,529	\$271,517,639	9.7%	\$286,654,747	5.6%
Raynham	\$117,796,813	\$129,233,397	9.7%	\$136,438,159	5.6%
Plainridge	\$120,611,807	\$132,321,691	9.7%	\$139,698,625	5.6%

Source: The Innovation Group

### *EBITDA Estimates*

A key component to our evaluation of potential tax structures as well as other considerations including facility scope and development costs is estimates of the level of

profitability that could support development and financing costs. In addition to determining the amount of direct employment for each of the casinos under the multiple scenarios, Pro Forma Operating Statements were prepared down to Earnings before Interest, Taxes, Depreciation and Amortization (“EBITDA”). EBITDA is a common metric utilized in the gaming and resort industries for evaluating the potential viability of a project and the amount of leverage that can be applied to a project. As discussed in the Tax and Regulatory section of this report, the EBITDA from a facility is also what most financial sources will use in evaluating the amount of leverage that a facility can sustain. Obviously a project with higher levels of EBITDA allows for greater capital investment as it can support more leverage.

It should be noted a full analysis or assessment related to non-gaming revenue producing departments was not prepared, however revenues for Hotel, Food & Beverage, and Entertainment & Other was estimated by applying a percentage of gaming revenue. These percentages were derived by reviewing the same relative percentages generated from existing facilities in Atlantic City, and estimates of facilities in Connecticut and Florida.

Operating expenses were then estimated including the assumed gaming tax rates. Keeping an eye on the overall EBITDA margin, operating expenses were developed by comparing operating characteristics of existing casinos to what is envisioned to be developed in Massachusetts.

In each of Low Case scenarios, the size of the resort, staffing levels and operating expenses were adjusted to reflect the reduced gamer visits projected in the market assessment models.

## Scenario 2

Scenario 2 includes one Resort Casino per each of the three regions.

<b>Scenario 2 - EBITDA Margins</b>			
	Region 1	Region 2	Region 3
HIGH			
Gross Gaming Revenue	\$648,724,294	\$685,326,403	\$477,764,207
Gross Revenue	\$817,392,610	\$863,511,268	\$596,010,848
EBITDA	\$225,522,265	\$240,692,171	\$152,984,517
EBITDA Margin	27.6%	27.9%	25.7%
LOW			
Gross Gaming Revenue	\$522,771,033	\$503,799,291	\$422,237,764
Gross Revenue	\$649,543,008	\$625,970,619	\$519,352,450
EBITDA	\$170,144,539	\$162,686,329	\$127,524,838
EBITDA Margin	26.2%	26.0%	24.6%

Source: The Innovation Group

### Scenario 3A

Scenario 3B includes one Resort Casino per each of the three regions plus an additional commercial resort license in the southeast region (Region 2) This second resort in the southeast region is assumed to pay a gaming tax equal to the other resorts at 27%:

#### Scenario 3A - EBITDA Margins

	Region 1	Region 2	Region 3	Region 2 Commercial
HIGH				
Gross Gaming Revenue	\$577,578,512	\$608,471,990	\$459,653,131	\$434,528,384
Gross Revenue	\$727,748,925	\$766,674,707	\$573,417,281	\$542,074,159
EBITDA	\$192,125,716	\$206,235,496	\$142,207,486	\$132,266,095
EBITDA Margin	26.4%	26.9%	24.8%	24.4%
LOW				
Gross Gaming Revenue	\$449,795,812	\$431,652,690	\$405,347,143	\$412,685,207
Gross Revenue	\$558,871,296	\$536,328,467	\$500,603,722	\$512,761,370
EBITDA	\$136,923,468	\$129,255,161	\$120,645,497	\$123,062,729
EBITDA Margin	24.5%	24.1%	24.1%	24.0%

Source: The Innovation Group

### Scenario 3B

Scenario 3B includes one Resort Casino per each of the three regions plus an additional resort license designated as Native American in the southeast region (Region 2). In this scenario it is assumed the Native American casino would pay an 18% gaming tax. The assumed reduction of gaming tax allowed for a higher margin to be achieved at the Native American facility.

#### Scenario 3B - EBITDA Margins

	Region 1	Region 2	Region 3	Region 2 Native American
HIGH				
Gross Gaming Revenue	\$572,351,273	\$599,857,171	\$458,009,929	\$476,714,589
Gross Revenue	\$721,162,604	\$755,820,036	\$571,367,386	\$594,701,450
EBITDA	\$189,937,216	\$202,347,401	\$141,540,675	\$199,224,986
EBITDA Margin	26.3%	26.8%	24.8%	33.5%
LOW				
Gross Gaming Revenue	\$445,618,571	\$425,585,372	\$404,078,486	\$448,694,798
Gross Revenue	\$553,681,075	\$528,789,824	\$499,036,930	\$557,503,287
EBITDA	\$135,889,288	\$127,739,835	\$119,703,716	\$182,861,078
EBITDA Margin	24.5%	24.2%	24.0%	32.8%

Source: The Innovation Group

## Scenario 3C

Scenario 3C includes one Resort Casino per each of the three regions plus an additional resort license designated as Native American in the southeast region (Region 2). In this scenario it is assumed the Native American casino would not pay a gaming tax.

### Scenario 3C - EBITDA Margins

	Region 1	Region 2	Region 3	Region 2 Native American
HIGH				
Gross Gaming Revenue	\$570,391,237	\$596,657,606	\$457,375,928	\$499,327,042
Gross Revenue	\$718,692,959	\$751,788,584	\$570,576,470	\$622,910,485
EBITDA	\$188,297,555	\$200,727,552	\$140,932,388	\$292,767,928
EBITDA Margin	26.2%	26.7%	24.7%	47.0%
LOW				
Gross Gaming Revenue	\$444,049,915	\$427,359,318	\$399,040,275	\$462,141,200
Gross Revenue	\$551,732,019	\$530,993,952	\$492,814,740	\$574,210,441
EBITDA	\$135,174,345	\$127,969,542	\$118,275,538	\$265,285,224
EBITDA Margin	24.5%	24.1%	24.0%	46.2%

Source: The Innovation Group

## Scenario 4A

Scenario 4B includes one Resort Casino per each of the three regions plus four racetrack licenses that allow for up to 750 slot machines per license. This assumes Suffolk Downs and Wonderland combine licenses for one location:

### Scenario 4A - EBITDA Margins

	Region 1	Region 2	Region 3	Suffolk Downs	Raynham	Plainridge
HIGH						
Gross Gaming Revenue	\$609,588,102	\$661,277,724	\$472,762,069	\$168,139,085	\$80,340,740	\$81,905,501
Gross Revenue	\$768,081,009	\$833,209,933	\$589,770,681	\$184,952,993	\$88,374,814	\$90,096,052
EBITDA	\$206,428,452	\$228,250,029	\$151,011,167	\$36,740,433	\$13,793,188	\$15,944,149
EBITDA Margin	26.9%	27.4%	25.6%	19.9%	15.6%	17.7%
LOW						
Gross Gaming Revenue	\$481,976,644	\$465,100,825	\$415,393,083	\$184,520,708	\$92,835,281	\$95,188,461
Gross Revenue	\$598,855,980	\$577,887,775	\$510,933,492	\$202,972,779	\$102,118,809	\$104,707,307
EBITDA	\$154,351,167	\$149,729,092	\$125,792,347	\$39,246,381	\$16,680,985	\$19,358,715
EBITDA Margin	25.8%	25.9%	24.6%	19.3%	16.3%	18.5%

Source: The Innovation Group

## Scenario 4B

Scenario 4B includes one Resort Casino per each of the three regions plus four licenses that allow for up to 1,500 slot machines per license at the existing horse tracks and the former dog tracks. This assumes Suffolk Downs and Wonderland combine licenses for one location:

The horse tracks and former dog track facilities show a better EBITDA and EBITDA margin on the low case as a result of the movement of the location of the resort in Scenario 1 and 2.

### Scenario 4B - EBITDA Margins

	Region 1	Region 2	Region 3	Suffolk Downs	Raynham	Plainridge
HIGH						
Gross Gaming Revenue	\$569,961,325	\$622,247,021	\$464,332,142	\$264,572,922	\$121,227,020	\$123,515,829
Gross Revenue	\$718,151,269	\$784,031,247	\$579,254,347	\$291,030,214	\$133,349,722	\$135,867,411
EBITDA	\$190,938,397	\$212,178,032	\$144,316,142	\$57,666,930	\$21,831,217	\$25,068,857
EBITDA Margin	26.6%	27.1%	24.9%	19.8%	16.4%	18.5%
LOW						
Gross Gaming Revenue	\$448,165,156	\$424,219,953	\$409,697,625	\$286,654,747	\$136,438,159	\$139,698,625
Gross Revenue	\$556,845,206	\$527,093,292	\$503,928,079	\$315,320,222	\$150,081,974	\$153,668,488
EBITDA	\$140,777,140	\$130,174,545	\$123,137,665	\$63,827,358	\$25,513,524	\$29,379,864
EBITDA Margin	25.3%	24.7%	24.4%	20.2%	17.0%	19.1%

Source: The Innovation Group

To reiterate, these estimates of EBITDA were utilized in evaluating overall potential tax structures as well as the viability of projects from a development sizing perspective. Ultimately, how much debt and equity capital can be raised for these projects is determined by the level of EBITDA achieved.

### *Supplemental Scenario*

The Innovation Group was requested to evaluate a fifth supplemental scenario that considered a resort in each region (with the Region 1 facility a prime location in/near Boston, a Native American facility as the only Destination Resort facility in Region 2, a Destination Resort facility in Region 3 and 750 slot machines at Raynham and Plainridge in the southeast region of the Commonwealth. This scenario was completed in an effort to gauge the potential impact on the forecasted revenues of the Destination Resorts and also the number of potential jobs created in the Commonwealth from the introduction of casino style gaming.

### Revenue Estimate

#### Scenario 5A

The assumption of the Region 2 location along with the use of a favorable location in Region 1 (similar to High Case assumptions used under the Scenario 2 modeling) generated estimated gaming revenues of approximately \$1.7 billion for the three locations as summarized in the following chart.

#### Scenario 5B

Under Scenario 5B, 750 slot machines were assumed to be implemented at both Raynham and Plainridge tracks. There was no assumption with regard to a hotel

development for either facility. In addition, non-gaming amenities are expected to be limited to a number of mid-priced dining options. Revenue generated at Raynham and Plainridge was forecasted to be \$166.6 million. However, by adding these two facilities, the Destination Resorts in Regions 1 and 2 are expected to lose approximately \$46 million as a result of the revenue siphoned off by the Raynham and Plainridge locations. Hence, the net impact to the total gaming revenue estimates in the Commonwealth under this scenario is a net gain of approximately \$120 million. The negative gaming revenue impact to the Destination Resorts in Region 1 and Region 2 approximates 5% of the total revenue estimates for those facilities. Hence, while the forecasted changes may result in some operational changes and job reductions as discussed later, the impact should not materially change the overall investment decision as to what should be built at these locations.

**Revenue Estimates for Scenario 5, Third Year of Operations  
(in millions)**

Scenario 5A	Region 2 - Native					Total
	Region 1	American	Region 3	Raynham	Plainridge	
Local Market	\$547.98	\$468.54	\$424.28			\$1,440.80
Tourism	\$130.82	\$76.56	\$76.40			\$283.78
<b>Total</b>	<b>\$678.80</b>	<b>\$545.10</b>	<b>\$500.68</b>			<b>\$1,724.58</b>
Scenario 5B	Region 2 - Native					Total
	Region 1	American	Region 3	Raynham	Plainridge	
Local Market	\$526.10	\$448.65	\$422.34	\$81.98	\$83.06	\$1,562.13
Tourism	\$128.50	\$76.45	\$76.40	\$0.56	\$1.00	\$282.91
<b>Total</b>	<b>\$654.60</b>	<b>\$525.10</b>	<b>\$498.74</b>	<b>\$82.54</b>	<b>\$84.06</b>	<b>\$1,845.04</b>
<b>Impact</b>	<b>(\$24.20)</b>	<b>(\$20.01)</b>	<b>(\$1.94)</b>			<b>\$120.46</b>
<b>Impact %</b>	<b>-4.42%</b>	<b>-4.27%</b>	<b>-0.46%</b>			<b>8.36%</b>

Source: The Innovation Group

# ECONOMIC IMPACT/BENEFITS TO MASSACHUSETTS

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## *Job Creation*

This section of The Innovation Group report will discuss the potential number of jobs that could be created in the Commonwealth from the introduction of casino gaming. As specific locations have not been identified, a complete economic and social impact assessment was not completed; however, based on a pro forma operating statement completed under each scenario, the number of jobs created can still be estimated. For demonstration purposes, we have chosen three scenarios as most representative of the alternatives available to the Commonwealth in order to estimate the job creation aspects of potential casino legislation in Massachusetts. These scenarios, as referenced in the introduction of this report, were considered because of the potential job creation, gaming tax generation and possible capital investment that would be made. Commonwealth

It should also be noted that we did not estimate in this analysis the number of construction jobs that would be created from building these resorts from the ground up. It could be expected that development of Destination Resorts in Massachusetts would create significant construction employment during the period of development.

A Pro Forma Operating Statement was created for each casino anticipated under the proposed scenarios and assumed the sizing estimates used in our analysis in order to estimate the expected gaming revenue potential. To be consistent, the one year Pro Forma Operating Statement was prepared using the Year 3 stabilized projections, which in this situation is assumed to be 2016. This process began by determining the number of employees needed to operate each resort efficiently yet provide the level of service that would be necessary in order to compete successfully in the Northeast market. The staffing guidelines were developed by studying employment data (both public and proprietary) from a number of gaming jurisdictions as well as interviewing operational department managers of existing casinos in the Northeast to determine ratios of employees to units. Staffing was determined using Full-Time Equivalents (FTE”). An FTE is the number of hours that represent what a full time employee would work over a given time period (assumed here to be 40 per week). Hourly rates or annual salaries were then applied to each position. These rates were estimated by examining rates of pay for casinos in the Northeast as well as considering the Massachusetts labor market. It should further be noted that an FTE may actually be filled by any number of part-time employees thereby putting more people to work.

The racetrack estimates in Scenario 4 are for the casino and casino amenities only and do not include personnel associated with the track or horse operation.

The following series of tables show the number of FTE’s need to operate the resorts in each of the regions.

## Scenario 2

Scenario 2 considers one resort casino in each of the three regions identified.

### Scenario 2- Estimated FTE's \*

	Region 1	Region 2	Region 3	Total
HIGH	4,222	4,365	3,391	11,978
LOW	3,426	3,304	2,915	9,645

Source: The Innovation Group

\*These are expected Full Time Employees and doesn't include construction or part time jobs.

## Scenario 3A

In Scenario 3A, with one resort in each region plus an additional commercial casino located in Region 2.

### Scenario 3A - Estimated FTE's \*

	Region 1	Region 2	Region 3	Region 2 Commercial	Total
HIGH	4,119	4,216	3,385	3,279	14,999
LOW	3,470	3,351	2,916	2,915	12,653

Source: The Innovation Group

\*These are expected Full Time Employees and doesn't include construction or part time jobs.

## Scenario 3B

In Scenario 3B, with one resort in each region plus a Native American casino located Region 2 that operates assuming an 18% gaming tax.

### Scenario 3B - Estimated FTE's \*

	Region 1	Region 2	Region 3	Region 2 - Native American	Total
HIGH	4,116	4,221	3,380	3,505	15,223
LOW	3,385	3,355	2,902	3,301	12,943

Source: The Innovation Group

\*These are expected Full Time Employees and doesn't include construction or part time jobs.

## Scenario 3C

In Scenario 3C, with one resort in each region plus a Native American casino located Region 2 that operates assuming a 0% gaming tax.

### Scenario 3C - Estimated FTE's \*

	Region 1	Region 2	Region 3	Region 2 - Native American	Total
HIGH	4,075	4,179	3,346	3,646	15,246
LOW	3,351	3,388	2,873	3,400	13,013

Source: The Innovation Group

\*These are expected Full Time Employees and doesn't include construction or part time jobs.

## Scenario 4A

Scenario 4B assumes one resort casino in each region plus three racetracks. Suffolk Downs is assumed to have 1,500 slot machines and the other two will operate with 750. It should be noted the number of FTE's estimated for the racetracks do not include the operation of the track itself.

### Scenario 4A - Estimated FTE's \*

	Region 1	Region 2	Region 3	Suffolk Downs	Raynham	Plainridge	Total
HIGH	4,116	4,336	3,391	637	413	413	13,305
LOW	3,355	3,382	2,916	659	427	427	11,167

Source: The Innovation Group

\*These are expected Full Time Employees and doesn't include construction or part time jobs.

## Scenario 4B

Scenario 4B assumes one resort casino in each region plus three racetracks. Suffolk Downs is assumed to have 3,000 slot machines and the other two will operate with 1,500. While this scenario includes three racino possibilities, the presumed lack of table games, a hotel, and other amenities such spa and entertainment reduce the number of FTE's needed to operate these smaller facilities. It should be noted the number of FTE's estimated for the racetracks do not include the operation of the track itself.

### Scenario 4B - Estimated FTE's \*

	Region 1	Region 2	Region 3	Suffolk Downs	Raynham	Plainridge	Total
HIGH	3,969	4,201	3,382	1,117	602	602	13,874
LOW	3,064	3,021	2,886	1,144	616	616	11,346

Source: The Innovation Group

\*These are expected Full Time Employees and doesn't include construction or part time jobs.

## Scenario Summary

The following table summarizes the direct job creation under each development scenario. These jobs do not include the jobs that will be needed during the construction phase. Also not included are jobs associated with the horse racing industry.

### Summary of Estimated of Direct FTE's Created by Scenario \*

	Scenario 2	Scenario 3A	Scenario 3B	Scenario 3C	Scenario 4A	Scenario 4B
HIGH	11,978	14,999	15,223	15,246	13,305	13,874
LOW	9,645	12,653	12,943	13,013	11,167	11,346

Source: The Innovation Group

\* Does not include racetrack personnel These are expected Full Time Employees and doesn't include construction or part time jobs.

## Supplemental Scenario Direct Job Creation

The pro forma model used for the previous scenarios was updated to reflect the projected revenue estimates and sizing expectations derived from the modeling exercise. Total direct jobs estimated for the resorts without a racetrack impact were forecasted at 10,783.

In scenario 5B, the introduction of 750 slot machines at Raynham and Plainridge is projected to create 413 jobs at each location for a total of 826 jobs. The decreased revenue at locations in Region 1 and Region 2 - Native American would dictate operators scale back expenses (which includes labor) to maintain sufficient operating margins. It is estimated that approximately 225 jobs could be lost from the resort operations. Consequently, the net effect of adding 750 slots to the two locations is an overall addition of an estimated 600 jobs as exhibited in the following tables.

### Scenario 5 – Job Creation Review \*

	Region 1	Region 2 - Native American	Region 3	Raynham	Plainridge	Total
Scenario 5A	4,241	3,479	3,391	0	0	11,111
Scenario 5B	4,142	3,461	3,391	413	413	11,820

Source: The Innovation Group

\*These are expected Full Time Employees and doesn't include construction or part time jobs.

### Scenario 5 Comparison \*

	Scenario 5A	Scenario 5B	Impact	Impact %
# of FTE's	11,111	11,820	709	6.4%

Source: The Innovation Group

\*These are expected Full Time Employees and doesn't include construction or part time jobs.

## Supplemental Scenario Conclusion

The introduction of 750 slot machines at the Raynham and Plainridge locations, while potentially cannibalizing the Destination Resorts in Regions 1 and 2 by approximately \$46 million, would likely grow the overall potential market gaming revenues by 8.4% or an incremental \$120 million. The proximity of Raynham and Plainridge to the population bases in their immediate area increases the accessibility of gaming for certain segments of the gaming population who are drawn by the convenience of a facility and that would not ordinarily travel longer distances to patronize one of the resort locations on a regular basis.

The conclusion with regard to the overall impact of slots at racetracks and the level of uncertainty that they create has been discussed previously in the Total Gross Gaming Revenue Comparisons: First Full Year of Operations section of this report.

## Indirect Job Creation

Indirect jobs are created as a result of direct spending by the casinos and employees of those casinos in local municipalities and the Commonwealth of Massachusetts. When a

sector of business, in this case gaming and casinos expands, it will generate new, direct jobs and consequently new wages and salaries. These wages will then be spent in the region having a multiplier effect toward indirect job creation as other businesses that provide goods and services to the gaming industry should expand to meet the new demand. In order to gauge the impact, economic multipliers were applied to the projected direct full-time jobs. Developed by the Bureau of Economic Analysis (BEA”), the Regional Industrial Multiplier System (“RIMS II”) was developed to quantify the impact on a region’s economic output resulting from changes in one or more industries.

Since the competitive scenarios analyzed did not identify specific locations, the impact on a statewide level was analyzed. Again, the direct and indirect jobs stated here do not specifically address jobs related to the operation of the racetracks themselves.

The following multipliers were applied to the FTE positions identified within the staffing models developed for each pro forma under the specific scenarios.

**Statewide Multipliers Used**

Amusements, gambling, and recreation	1.3966
Accommodation	1.6754
F&B	1.3715
Administrative and support services	1.5799

Source: RIMS II

For instance, a multiplier of 1.6754 would be applied to every full time position created by the hotel division. One hotel position would create .6754 jobs within the Commonwealth.

The following table reflects the number of indirect jobs that may be created in the Commonwealth under each scenario.

**Direct & Indirect Job Comparison \***

	Scenario 2		Scenario 3A		Scenario 3B		Scenario 3C		Scenario 4A		Scenario 4B	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
Direct Jobs	11,978	9,645	14,999	12,653	15,223	12,943	15,246	13,013	13,305	11,167	13,874	11,346
Indirect Jobs *	5,855	4,798	7,338	6,259	7,447	6,402	7,459	6,437	6,485	5,435	6,723	5,603
Total Jobs	17,833	14,443	22,336	18,911	22,671	19,345	22,705	19,449	19,791	16,602	20,597	16,949

Source: The Innovation Group

\* Does not include labor associated with racetrack operation These are expected Full Time Employees and doesn't include construction or part time jobs.

***Gaming Taxes***

Using the three year gaming revenue forecast, the estimated gaming tax the Commonwealth would receive was calculated by applying a rate of a 27% gaming tax for resort facilities. The following tables only reflect the Commonwealth’s portion of the tax and do NOT reflect local fees, mitigation fees or the Race Horse Development Fund (“RHDF”) fees.

## Scenario 2

Anticipated gaming tax generated in the first three years of operation under Scenario 2:

### Scenario 2 - Gaming Taxes Generated at 27% Tax Rate

	Gaming Tax	Year 1	Year 2	Year 3	Total
<b>HIGH</b>					
Region 1	27.0%	\$151,224,312	\$165,906,284	\$175,155,559	\$492,286,155
Region 2	27.0%	\$159,756,641	\$175,266,994	\$185,038,129	\$520,061,763
Region 3	27.0%	\$111,371,756	\$122,184,547	\$128,996,336	\$362,552,639
<b>Total by Year</b>		<b>\$422,352,708</b>	<b>\$463,357,825</b>	<b>\$489,190,024</b>	<b>\$1,374,900,558</b>
<b>LOW</b>					
Region 1	27.0%	\$121,863,310	\$133,694,699	\$141,148,179	\$396,706,188
Region 2	27.0%	\$117,440,802	\$128,842,821	\$136,025,809	\$382,309,432
Region 3	27.0%	\$98,427,970	\$107,984,084	\$114,004,196	\$320,416,250
<b>Total by Year</b>		<b>\$337,732,082</b>	<b>\$370,521,604</b>	<b>\$391,178,184</b>	<b>\$1,099,431,870</b>

Source: The Innovation Group

Gaming taxes paid to the Commonwealth for the first three years could range between \$1.1 billion and \$1.4 billion.

## Scenario 3A

Anticipated gaming tax generated in the first three years of operation under Scenario 3A. This scenario assumes an additional commercial resort in Region 2 will pay the same tax as the other resort casinos:

### Scenario 3A - Gaming Taxes Generated at 27% Tax Rate

	Gaming Tax	Year 1	Year 2	Year 3	Total
<b>HIGH</b>					
Region 1	27.0%	\$134,639,498	\$147,711,294	\$155,946,198	\$438,296,989
Region 2	27.0%	\$141,841,085	\$155,612,065	\$164,287,437	\$461,740,587
Region 3	27.0%	\$107,149,877	\$117,552,778	\$124,106,345	\$348,809,001
Region 2 - Commercial	27.0%	\$101,293,040	\$111,127,316	\$117,322,664	\$329,743,019
<b>Total by Year</b>		<b>\$484,923,501</b>	<b>\$532,003,452</b>	<b>\$561,662,645</b>	<b>\$1,578,589,597</b>
<b>LOW</b>					
Region 1	27.0%	\$104,852,035	\$115,031,844	\$121,444,869	\$341,328,748
Region 2	27.0%	\$100,622,686	\$110,391,879	\$116,546,226	\$327,560,792
Region 3	27.0%	\$94,490,592	\$103,664,436	\$109,443,729	\$307,598,757
Region 2 - Commercial	27.0%	\$96,201,171	\$105,541,090	\$111,425,006	\$313,167,267
<b>Total by Year</b>		<b>\$396,166,484</b>	<b>\$434,629,249</b>	<b>\$458,859,830</b>	<b>\$1,289,655,564</b>

Source: The Innovation Group

### Scenario 3B

Anticipated gaming tax generated in the first three years of operation under Scenario 3B. This scenario assumes 18% gaming tax for the Native American facility and a one year delay in opening:

#### Scenario 3B - Gaming Taxes Generated at 27% Tax Rate

	Gaming Tax	Year 1	Year 2	Year 3	Total
<b>HIGH</b>					
Region 1	27.0%	\$133,420,975	\$146,374,467	\$154,534,844	\$434,330,285
Region 2	27.0%	\$139,832,883	\$153,408,891	\$161,961,436	\$455,203,210
Region 3	27.0%	\$106,766,830	\$117,132,542	\$123,662,681	\$347,562,052
Region 2 - Native American	18.0%	\$0	\$79,729,269	\$85,808,626	\$165,537,895
<b>Total by Year</b>		<b>\$380,020,687</b>	<b>\$496,645,169</b>	<b>\$525,967,587</b>	<b>\$1,402,633,443</b>
<b>LOW</b>					
Region 1	27.0%	\$103,878,277	\$113,963,547	\$120,317,014	\$338,158,838
Region 2	27.0%	\$99,208,332	\$108,840,209	\$114,908,050	\$322,956,591
Region 3	27.0%	\$94,194,855	\$103,339,987	\$109,101,191	\$306,636,033
Region 2 - Native American	18.0%	\$0	\$75,043,032	\$80,765,064	\$155,808,096
<b>Total by Year</b>		<b>\$297,281,464</b>	<b>\$401,186,775</b>	<b>\$425,091,319</b>	<b>\$1,123,559,558</b>

Source: The Innovation Group

### Scenario 3C

Anticipated gaming tax generated in the first three years of operation under Scenario 3C this scenario assumes no gaming tax for the Native American facility and a one year delay in opening:

#### Scenario 3C - Gaming Taxes Generated at 27% Tax Rate

	Gaming Tax	Year 1	Year 2	Year 3	Total
<b>HIGH</b>					
Region 1	27.0%	\$132,964,070	\$145,873,203	\$154,005,634	\$432,842,907
Region 2	27.0%	\$139,087,031	\$152,590,626	\$161,097,554	\$452,775,211
Region 3	27.0%	\$106,619,038	\$116,970,401	\$123,491,501	\$347,080,939
Region 2 - Native American	0.0%	\$0	\$0	\$0	\$0
<b>Total by Year</b>		<b>\$378,670,139</b>	<b>\$415,434,230</b>	<b>\$438,594,688</b>	<b>\$1,232,699,057</b>
<b>LOW</b>					
Region 1	27.0%	\$103,512,607	\$113,562,375	\$119,893,477	\$336,968,459
Region 2	27.0%	\$99,621,857	\$109,293,882	\$115,387,016	\$324,302,754
Region 3	27.0%	\$93,020,397	\$102,051,503	\$107,740,874	\$302,812,774
Region 2 - Native American	0.0%	\$0	\$0	\$0	\$0
<b>Total by Year</b>		<b>\$296,154,860</b>	<b>\$324,907,759</b>	<b>\$343,021,367</b>	<b>\$964,083,987</b>

Source: The Innovation Group

## Scenario 4A

Anticipated gaming tax generated in the first three years of operation under Scenario 4A. This scenario assumes assuming the horse tracks and former dog tracks will operate 750 slot machines each (The combined license at Suffolk Downs will be permitted 1,500). These facilities will be taxed at 40% of gaming revenue:

### Scenario 4A - Gaming Taxes at 27% Tax Rate for Resorts \*

Gaming Tax	Year 1	Year 2	Year 3	Total	
HIGH					
Region 1	27.0%	\$142,101,263	\$155,897,502	\$164,588,788	\$462,587,552
Region 2	27.0%	\$154,150,646	\$169,116,728	\$178,544,986	\$501,812,360
Region 3	27.0%	\$110,205,706	\$120,905,289	\$127,645,759	\$358,756,753
Suffolk Downs	40.0%	\$58,066,595	\$63,704,129	\$67,255,634	\$189,026,358
Raynham	40.0%	\$27,745,561	\$30,439,305	\$32,136,296	\$90,321,162
Plainridge	40.0%	\$28,285,949	\$31,032,158	\$32,762,201	\$92,080,308
<b>Total by Year</b>		<b>\$520,555,720</b>	<b>\$571,095,110</b>	<b>\$602,933,662</b>	<b>\$1,694,584,492</b>
LOW					
Region 1	27.0%	\$112,353,718	\$123,261,846	\$130,133,694	\$365,749,258
Region 2	27.0%	\$108,419,791	\$118,945,984	\$125,577,223	\$352,942,998
Region 3	27.0%	\$96,832,404	\$106,233,609	\$112,156,132	\$315,222,146
Suffolk Downs	40.0%	\$63,723,966	\$69,910,758	\$73,808,283	\$207,443,007
Raynham	40.0%	\$32,060,533	\$35,173,206	\$37,134,112	\$104,367,852
Plainridge	40.0%	\$32,873,200	\$36,064,773	\$38,075,384	\$107,013,358
<b>Total by Year</b>		<b>\$446,263,612</b>	<b>\$489,590,177</b>	<b>\$516,884,829</b>	<b>\$1,452,738,618</b>

Source: The Innovation Group

\* Racetracks taxes at 40%

## Scenario 4B

This scenario assumes assuming the horse tracks and former dog tracks will operate 1,500 slot machines each (The combined license at Suffolk Downs will be permitted 3,000). These facilities will be taxed at 40% of gaming revenue:

**Scenario 4B - Gaming Taxes at 27% \* Tax Rate for Resorts**

	Gaming Tax	Year 1	Year 2	Year 3	Total
<b>HIGH</b>					
Region 1	27.0%	\$132,863,853	\$145,763,256	\$153,889,558	\$432,516,667
Region 2	27.0%	\$145,052,187	\$159,134,924	\$168,006,696	\$472,193,806
Region 3	27.0%	\$108,240,603	\$118,749,399	\$125,369,678	\$352,359,680
Suffolk Downs	40.0%	\$91,369,885	\$100,240,747	\$105,829,169	\$297,439,800
Raynham	40.0%	\$41,865,580	\$45,930,199	\$48,490,808	\$136,286,588
Plainridge	40.0%	\$42,656,017	\$46,797,378	\$49,406,331	\$138,859,726
<b>Total by Year</b>		<b>\$562,048,124</b>	<b>\$616,615,903</b>	<b>\$650,992,240</b>	<b>\$1,829,656,267</b>
<b>LOW</b>					
Region 1	27.0%	\$104,471,912	\$114,614,816	\$121,004,592	\$340,091,320
Region 2	27.0%	\$98,890,039	\$108,491,013	\$114,539,387	\$321,920,440
Region 3	27.0%	\$95,504,735	\$104,777,039	\$110,618,359	\$310,900,132
Suffolk Downs	40.0%	\$98,995,812	\$108,607,055	\$114,661,899	\$322,264,766
Raynham	40.0%	\$47,118,725	\$51,693,359	\$54,575,263	\$153,387,347
Plainridge	40.0%	\$48,244,723	\$52,928,676	\$55,879,450	\$157,052,849
<b>Total by Year</b>		<b>\$493,225,945</b>	<b>\$541,111,959</b>	<b>\$571,278,951</b>	<b>\$1,605,616,854</b>

Source: The Innovation Group

\* Racetracks taxes at 40%

With three racinos taxed at 40% (not including RHDF) added to the competitive mix the potential gaming tax generated could range from \$1.6 billion to \$1.8 billion.

**Gaming Tax Summary**

Base on the gaming revenue ramp-up analysis, the following table summarizes the total gaming tax generated under each scenario for the first three years of operations

**Gaming Tax at (27%) Generated for First Three Years**

	Scenario 2	Scenario 3A	Scenario 3B	Scenario 3C	Scenario 4A	Scenario 4B
High	\$1,374,900,558	\$1,578,589,597	\$1,402,633,443	\$1,232,699,057	\$1,694,584,492	\$1,829,656,267
Low	\$1,099,431,870	\$1,289,655,564	\$1,123,559,558	\$964,083,987	\$1,452,738,618	\$1,605,616,854

Source: The Innovation Group

**Alternative Gaming Tax**

As a result of the recommendation that an up-front license fee required for each licensee, (see subsequent sections of this report) The Innovation Group has recommended a flat gaming tax rate of 25% which is 2% lower than what has been discussed up to this point. The following chart show what the Ramp-Up of gaming taxes would be for the first three years of operations under a 25% tax rate.

### Gaming Tax (25%) Generated for First Three Years

	Scenario 2	Scenario 3A	Scenario 3B	Scenario 3C	Scenario 4A	Scenario 4B
High	\$1,273,056,072	\$1,461,657,034	\$1,310,996,736	\$1,141,388,016	\$1,596,572,887	\$1,736,539,960
Low	\$1,017,992,472	\$1,194,125,522	\$1,051,874,265	\$892,670,358	\$1,376,152,366	\$1,533,549,307

Source: The Innovation Group

## Smoking Impact

### Case Studies: Casinos and Smoking Ban Impacts

The following comparables were examined in order to understand the effects of smoking bans on gaming.

#### Delaware

This analysis reflects historical revenue performance of the slots at the three Delaware racetrack casinos (racinos) before and after the initiation of a statewide ban. In Atlantic City, where there is currently no ban on casino smoking, managers noted the increase in visitation from primary market areas for the Delaware facilities and attribute growth in revenue to the smoking ban.

#### Revenue Impacts

For the initial 12-month period following the November 27, 2002 ban, revenues for the three facilities in the state of Delaware were down 11.2% from the same period one year earlier. Delaware Park is the most proximate facility to Philadelphia, Pennsylvania, a major feeder market for both Delaware Park and Atlantic City and, as a result, the impacts on Delaware Park were the greatest.

In the case of Dover Downs, a significant rebound was experienced in the second year following the ban. The facility completed an expansion in March of 2004, adding 500 machines, a variable that, when combined with the typical marketing efforts that go into an expansion, likely led to a further mitigation of the effects the ban would have otherwise induced.

The following table shows the percentage change in annual win for Delaware racinos by calendar year since 2000 for the period before and after the smoking ban. It can be clearly seen that, up until the smoking ban, the annual win consistently recorded significant increases over the same period in the previous year. For example, annual win increased by 7.4% in 2002 over the previous year and declined by 11.3% in 2003. Prior to 2000, the annual statewide revenue growth was at least 15% per year. Twelve-month revenue totals prior to and post-smoking ban are also provided for more precise comparisons. It is noted that revenues have recovered and are now above pre-ban levels at all three tracks, three years after the ban was put in place.

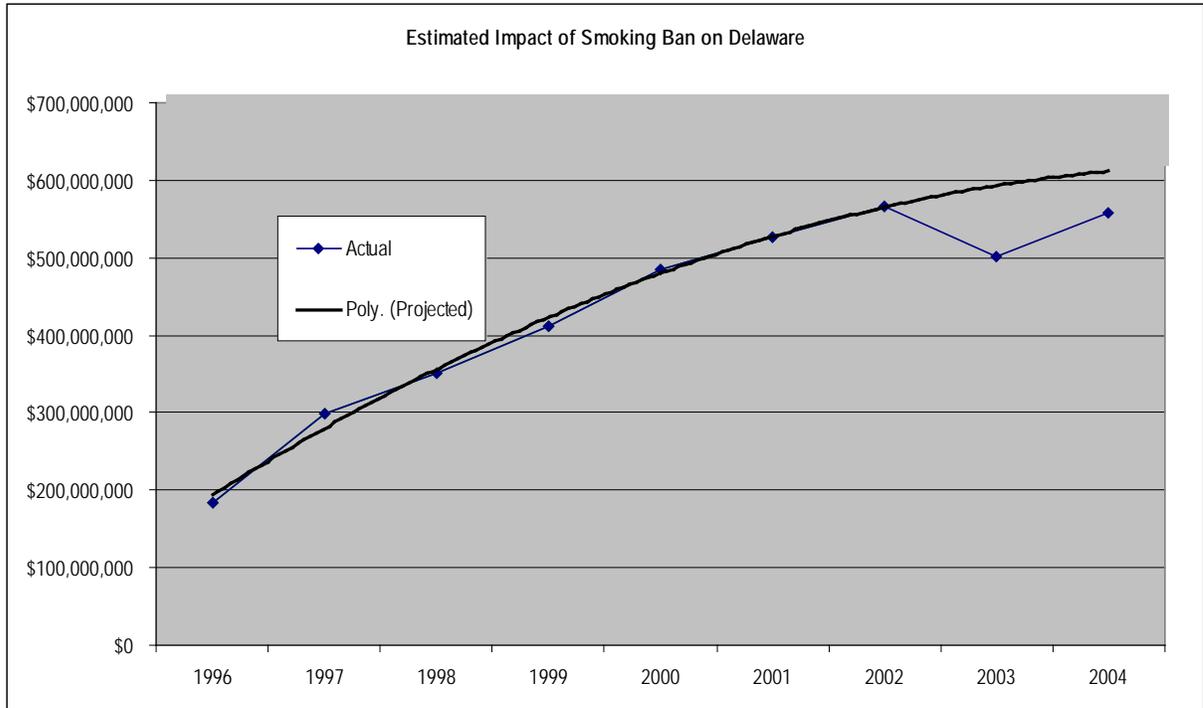
**Annual Win of Delaware Racinos (US \$)**

	Delaware Park	% Change	Dover Downs	% Change	Harrington Raceway	% Change	Total Win	% Change
2000	\$245,470,800		\$156,999,600		\$82,633,900		\$485,104,300	
2001	\$263,421,200	7.30%	\$168,373,700	7.20%	\$95,145,000	15.10%	\$526,939,900	8.60%
2002	\$268,209,000	1.80%	\$186,893,500	11.00%	\$110,807,400	16.50%	\$565,909,900	7.40%
2003	\$233,889,500	-12.80%	\$167,411,100	-	\$100,699,100	-9.10%	\$501,999,700	-11.30%
				10.40%				
2004	\$261,596,000	11.80%	\$191,847,000	14.60%	\$105,856,600	5.10%	\$559,299,600	11.40%
2005	\$272,026,200	3.99%	\$194,644,900	1.46%	\$112,874,900	6.63%	\$579,546,000	3.62%
11/01-10/02	\$271,270,500		\$187,023,800		\$111,315,900		\$569,610,200	
11/02-10/03	\$236,500,800	-12.80%	\$168,454,300	-9.90%	\$100,929,300	-9.30%	\$505,884,400	-11.20%
11/03-10/04	\$262,529,300	11.00%	\$191,281,300	13.60%	\$107,662,200	6.70%	\$561,472,800	11.00%
11/04-10/05	\$271,582,000	3.40%	\$193,993,000	1.40%	\$111,505,400	3.60%	\$577,080,400	2.80%

Source: Delaware State Lottery; The Innovation Group calculations

While revenues at the three tracks declined by 11.3% in 2003, this is not the total impact, as it does not take into consideration the revenue growth that would otherwise have been expected.

As demonstrated in the chart below, it is estimated that the Delaware racinos lost two years of growth potential, as demonstrated by the polynomial trend line (“poly. (Projected)”). Based on the trend analysis, the net impact on revenue at the three racinos for the first year following the ban was estimated at \$100 million, or a decline of 16.7% of actual 2003 revenue performance from 2003 projections which assumed no ban. The recovery started in the second year after the ban, however, revenues for the year were still down approximately \$47 million or 7.7% from the 2004 “no-ban” projections.



The impact on the Delaware market has been analyzed by several other researchers as well, who come to similar conclusions that the impacts were in the range of 13% to 18% overall.<sup>6</sup> It is contended by one author that the impact would have been even greater if not for the addition of gaming devices to several of the facilities, as well as the provision of smoking area terraces in effort to mitigate the smoking ban impacts.

Additionally, Price Waterhouse Coopers<sup>2</sup> conducted a study on the potential effect on gaming revenues in Atlantic City if a smoking ban in casinos was implemented as proposed earlier this year. This study concluded that Atlantic City casinos would lose more than 10% in total gaming revenue in each of the first two years of such a ban.

## Illinois

Illinois and surrounding states including Iowa, Indiana, and Missouri offer casino gaming within state borders. In several regions proximate casinos in two or more states compete against one another. These regions include the area surrounding Chicago, the Quad Cities, St. Louis, and southern Illinois. In January of 2008 the Smoke Free Illinois Act went into effect and forced a 100% ban on smoking in the state's casinos.

The Federal Reserve Bank of St. Louis, as part of its Working Paper Series, conducted a study (revised March 2010) on the impact of the smoking ban on casinos located in Illinois and testing the hypothesis that other, out-of-state casinos not subject to the

<sup>6</sup> Pakko, Michael, "Smoke-Free Law *Did* Affect Revenue from Gaming in Delaware", *Federal Reserve of St. Louis Working Paper 2005-028B* (2005).

<sup>2</sup> PriceWaterhouseCoopers, "Smoking Ban Economic Effect Analysis", 2005.

smoking ban benefited. The study, titled *The Revenue Performance of Casinos after a Smoking Ban: The Case of Illinois*<sup>7</sup>, used a series of statistical regressions to first conclude that the state experienced an overall decline related to the smoking ban of 9.1% in attendance and a 20.4% decline in adjusted gaming revenue. The analysis controlled for other factors including changes in supply, expansions of facilities, weather, and flooding and related closings. While the study did not appear to control for changes in the tax rate in Illinois, in some of the aforementioned regional markets the analysis isolated the impacts of the smoking ban.

The effects in the Chicago market were the most easily distinguished and indicate a 10.1% drop in attendance and a 19.8% decline in adjusted gaming revenue attributable to the smoking ban at Illinois facilities. While other markets experienced similar results, statistically it proved difficult to isolate the effects of the smoking ban. Moreover, income levels and other demographics make the Chicago area most comparable to the potential impacts in Massachusetts.

### Australia

In Australia, nearly \$2.0 billion was generated by the 11,000 slot machines and 1,115 table games offered in 13 casinos in 2004. Properties are largely modeled in a similar fashion to casino resorts in the United States and collectively offer more than 3,000 hotel rooms. In the 2003 fiscal year, the casinos hosted approximately 2,500 conventions and meetings and attracted more than 38 million visitors. International play generates roughly one-third of the win at three larger resorts, though market-wide this play is diluted to approximately 20% of gaming revenue. This play comes largely from Singapore, Malaysia, Thailand, and Indonesia, with increasing visitation from China.

Among World Health Organization (“WHO”) regions, the Western Pacific Region, which covers East Asia and the Pacific, has the highest smoking rate in the world, with nearly two-thirds of men smoking. The rate for females is considerably lower, but since males comprise the majority of VIP gamers, the average for the typical demography of the VIP gamer population is likely greater than 50%, independent of any correlation between gaming and tobacco use. In fact, it is estimated that 60% of international visitors smoke, given the enormity of the Chinese population and the high male smoking prevalence in China.

Smoking bans in Australia have been introduced on a state-by-state basis over the past five years, with bans occurring at casinos as well as at pubs and clubs where pokies (ambient machines located in bars and taverns) are played. In most cases the bans have been on the entire gaming floor, with casinos designing outside smoking areas in close proximity to the gaming floors. However for the casinos relying on international junket play for VIP business, the introduction of the smoking ban has been staggered.

The impact of the smoking ban in each state has been somewhat difficult to determine based on numerous non-smoking-related factors, such as facility construction,

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<sup>7</sup> *The Revenue Performance of Casinos after a Smoking Ban: The Case of Illinois*; **Invalid source specified.**

expansions, regional economic crises, actual win % relative to expected win, etcetera. Most notably, the SARS crisis in 2003 coincided with the introduction of smoking bans in several states, which greatly impacted international visitation – though for some, the desire to game meant traveling to Australia rather than to Macau due to the relative health risks. As a result, the net impact on visitation that is solely attributable to the smoking ban is difficult to determine for Australia. It should also be noted that casinos have been some of the last places in Australia to experience smoking bans, such that the local population quickly became accustomed to not being able to smoke, and there are no domestic options for smoking while gaming other than at private clubs

In a 2004 report, ABN AMRO, is an independent bank, wholly owned by the Dutch Government and under supervision of the Dutch Central Bank, also estimated that 20% of gaming revenues in Australian casinos comes from Asian gamers. Australian casinos generate 40% of their revenues on the slots, whereas Asian gamers in Australia generate 90% of their gaming expenditures on the baccarat tables. As mentioned, Asian play is primarily limited to three casinos in Australia – Crown, Jupiters Gold Coast, and Burswood; with Crown attaining 63% of the international high-end play in Australia in 2003, and Jupiters having a slight advantage over Burswood with 20% of the international high-end market. Full smoking bans were put in place at Australia's 10 other casinos by the end of 2006, with main floor smoking bans in place for the larger facilities. VIP room smoking bans generally have been put in place. Market-wide, the casino clientele at the Australian casinos has historically been 95% domestic, however, for the larger facilities with international gaming rooms; the international patron share is naturally higher.

The main floor smoking ban at Burswood was put in place in December 2001. The following 18 months had tourism challenges that stemmed from general terrorism threats (including after-effects of 9/11, the Bali bombing, etc.), as a result of the Iraq war, and due to fears related to the SARS virus. While a smoking ban in the VIP room/International Casino Business ("ICB") at Burswood has not yet been established, the ICB win percentage in the year following the smoking ban was significantly below the expected win, such that win from this market segment was down considerably despite not being impacted by smoking regulations. As a result, while gaming revenue for the entire casino was down for the year, it is not possible to directly attribute the impacts to the smoking ban.

The following table demonstrates the year over year changes at Burswood. It should be noted that gaming revenues from the local market decreased for the first fiscal year impacted by the smoking ban, and showed limited growth for the first full year in which the ban was in place (2002/2003).

### Burswood Casino Performance (Revenues in millions)

	1999/2000	2000/2001	2001/2002	2002/2003	2003/2004
Total	A\$297.2	A\$277.2	A\$292.4	A\$252.8	A\$286.4
Local	A\$172.9	A\$202.6	A\$194.6	A\$197.5	A\$216.6
Local Market Rev Growth	N/A	17.2%	-3.9%	1.5%	9.7%
International win	A\$124.3	A\$74.6	A\$97.8	A\$55.3	A\$69.8
ICB Hold %	N/A	1.08%	1.42%	0.89%	1.81%

Source: Burswood media releases

Local market revenues likely would have grown at a pace more comparable to the 2003/2004 rate (9.6% per year) had the ban not been imposed (note: the growth rate from 1999/2000 to 2000/2001 was over 17%). In the absence of more in-depth statistical analysis, we can only conclude that a number of factors contributed to the level of international play.

In Queensland, Jupiters Gold Coast initiated smoke-free gaming on its main floor in October 2001, but is not required to have smoke-free VIP rooms. Crown Casino in Melbourne has been steadily increasing its non-smoking space since 2002, which now comprises over 90% of its gaming floor. However, VIP gaming areas are still exempt from the smoking regulations. Revenues for these properties were not provided, however, given that Jupiters and Crown are among the largest casinos in Australia, it could be expected that similar growth rates would be revealed for those properties (with any disparity likely reflective of construction or renovation issues). As shown in the table below, revenue growth during the years 2001 through 2003 was stunted, with the smoking ban being one of several factors contributing to the slowdown. Nevertheless, it is reasonable to assume that the smoking ban had a 4% to 5% annual impact on gaming revenues during this period.

### Aggregate Australia Casino Performance (Revenues in millions)

	1998/1999	1999/2000	2000/2001	2001/2002	2002/2003	2003/2004
Total	A\$2,217.8	A\$2,397.4	A\$2,517.4	A\$2,525.6	A\$2,530.6	A\$2,637.5
% change	N/A	8.1%	5.0%	0.3%	0.2%	4.2%

Source: Australia Casino Association

## Canada

The prevalence of smoking in Canada is comparable to that of the United States – according to the WHO; approximately 23% of the adult population smokes regularly, with minimal differences between males and females (males 27%, females 23%).

### Province Level Smoking Prevalence in Canada

The Canadian government surveys citizens in order to investigate and protect the national health. Awareness programs as to health challenges that may arise from smoking have led to significant declines in the number of Canadian smokers. The prevalence of smoking prior to the smoking bans discussed above is presented in the following chart. These statistics are comparable to the United States, where the WHO estimates that 23.6% of Americans smoke.

### **Incidence of Smoking, Canada**

Province	Population	Males	Females
Nova Scotia	23.4%	25.8%	21.2%
Ontario	20.1%	22.7%	17.6%
British Columbia	16.3%	17.9%	14.7%

Source: National Population Health Survey, 2001

Smoking bans in Canadian casinos have been put in place in different provinces during the past five years, including partial and full bans, as well as designated smoking areas. The bans have had mixed impacts. In most cases the bans have been on the entire gaming floor and outside smoking areas have been designated to accommodate gamers. However, in cases that allowed for distinct smoking and non-smoking areas, gaming revenue remained relatively flat compared to the prior period.

#### **Nova Scotia**

The Nova Scotia Gaming Corporation (“NSGC”) operates two casinos; Casino Sydney (375 slots, 10 tables) and Casino Halifax (758 slots, 35 tables). No other casinos operate in the immediate market area. A province-wide network of video lottery terminals (“VLTs”) is operated by Atlantic Lottery Corporation, through an agreement with NSGC, and includes approximately 1,400 VLTs in the Halifax market area and 600 in the Sydney area. These ambient machines are located primarily in bars and nightclubs. In addition, the 2006 Global Gaming Almanac indicates that approximately 400 machines are hosted on First Nation reservations. The Membertou First Nation offers five gaming pavilions that operate 24 hours a day.

A smoking ban was instituted at Casino Sydney on July 7, 2001, requiring 50% of the gaming area to be designated as non smoking. This proportion was increased to 75% on July 1, 2002 and to 100% on July 1, 2003. Casino Sydney permits smoking outdoors in a modest patio area without weather protection.

Following the initial three months of the 50% phase-in (July – September 2001), gaming revenues were virtually unchanged. The 12-month anniversary date saw similar results (-2%). The following year, at 75% non-smoking, revenue for the initial three months was down 7.6% from 2001, declining further to 15.1% (twelve months) at year end.

On July 1, 2003 the smoking ban was applied to 100% of the gaming floor and revenues continued to decline. Total revenues declined 26% for the three months ended September 1, 2003, compared to the same period in 2000. Full year comparisons yielded similar results.

Several factors need to be considered when viewing the Casino Sydney results however, including the depressed economic conditions in the area as well as VLT centers on the nearby Membertou First Nation lands, where the smoking ban does not apply. Taking these factors into account, and the pattern of impacts over the three year phase-in period,

stabilized smoking ban impacts on Casino Sydney is estimated in the range of 8% to 12%.

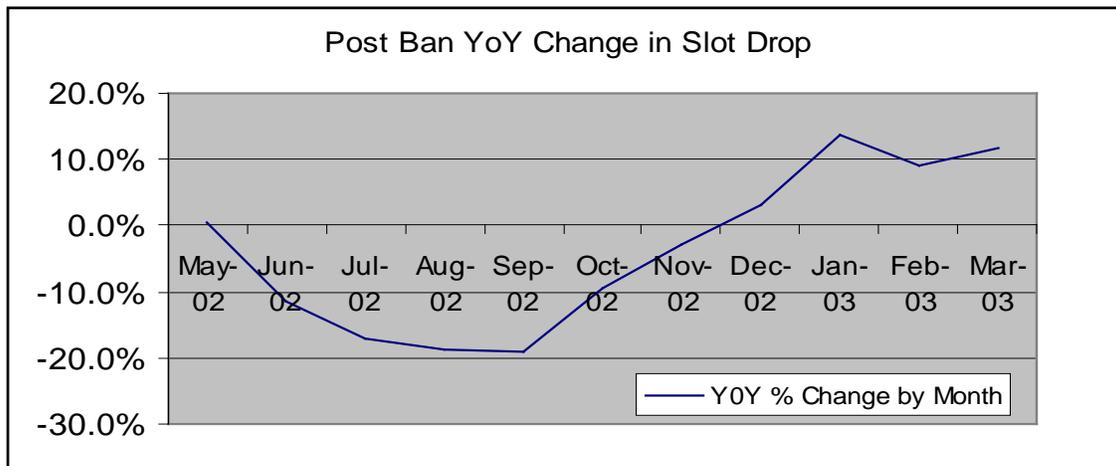
The smoking ban at Casino Halifax was implemented in July 2003, however the ban allowed for an area up to 25% of the gaming floor to be a designated smoking room (DSR) with separate ventilation. Patrons are permitted to smoke and game at the same time in these specially-designed areas.

Revenues at Casino Halifax have largely been unaffected by the smoking ban, most likely as a result of the DSR. In fact, other than the first three months of introduction, revenues grew on a month-over-month basis from July 2003 through July 2004.

### Vancouver

The Greater Vancouver Area (comprised of Vancouver, Burnaby, Richmond, Surrey, New Westminster, and Coquitlan) contains nine casinos, six of which offer both slot machines and table games, while the remaining three casinos are table game-only facilities. Each of the municipalities comprising the Greater Vancouver Area is able to interpret the province-wide smoking guidelines for development of bylaws but, generally, these rules apply to all public places. Only the city of Burnaby permits the development of DSRs. Other Vancouver municipalities have taken a much more stringent approach to implementing the ban.

The smoking ban commenced in the Greater Vancouver Area in May 2002, with a full ban such that no Greater Vancouver Area casinos were able to accommodate smokers (either while playing, or in separate areas). In December of 2002, the Burnaby casino developed and opened a DSR. The revenue fluctuations for slot machine and table game play at the Burnaby casino (on a month-over-month basis) since introduction of the ban and the DSR show an interesting pattern. The chart below illustrates post ban year-over-year change in slot handle.



Month-over-month declines in slot machine play reached a peak of -19% in September 2002, but decreased to -9% and -5% in October and November. A portion of this decline, however, was attributable to competition from a new casino that opened in an overlapping market area during the previous year. This caused a drop in Burnaby casino slot revenue beginning in October 2001 and resulted in a less noticeable percentage variance in October and November 2002. Based on our discussions with Burnaby casino management, however, the net impacts of the smoking ban likely remained in the 10%-plus range until the DSR reversed this trend.

Table game play was largely unaffected, with gains in table revenue in almost every month.

## Ontario

The Innovation Group completed primary research regarding the impacts of a smoking ban in Ontario. An important fact was verified via statistical confirmation, proving particularly relevant to the current analysis. A gaming facility implementing a smoking ban in a non-competitive environment will incur a less severe revenue impact and recover to status quo revenue levels more quickly than one undergoing a similar ban in a competitive marketplace where the competition is not operating in a smoke-free environment.

Quantifying this in a controlled statistical environment, we found a facility without immediate competition in its primary markets to sustain a -12.1% impact as of the first anniversary date of the ban, versus a -14.4% decline for a facility with a competing facility approximately 27 miles away. By the second anniversary date of the ban, the first facility had begun to recover, demonstrating 5.9% year-over-year growth, whereas the more competitive facility stagnated in the second year following the ban, showing a negligible year-over-year revenue decline of -0.6%.

## New Zealand

Casino gaming in New Zealand has become quite popular since its introduction in 1994, when it joined the existing lottery and racing offerings. Gaming in the form of slot machines is offered in both casinos and ambient locations such as pubs and taverns. Approximately 40% of industry revenue is attributable to machines outside casinos, 31% attributable to casinos, with 19% and 10% going to racing and lotteries, respectively. Historical growth in gaming revenue at casinos has been robust, likely averaging about 6% in recent years. However, according to Internal Affairs gaming policy manager John Markland, the December 2004 smoking ban corresponded with only the second drop in gaming revenue in 25 years.

Specific facilities attribute the decline in casino revenue to several factors. For example, the Sky City facility in Auckland was expanding its casino by adding a second floor and experienced a delay in introducing new slot machines when the ban was imposed, leading to a further impact of revenue. However, in Ashburton, news reports indicated a 25% decline immediately followed the ban, easing to 20% with time.

## South Africa

According to the WHO, in South Africa, 42% of males and 11% of females smoke. Average per-smoker cigarette consumption is 2,276 sticks per year. Casinos in South Africa offer both smoking-permitted rooms and non-smoking rooms. Based on information provided to us by MGM MIRAGE for five South Africa properties, smoking rooms generally account for between 30% and 40% of the gaming positions and gaming revenues associated with these smoking areas are in the range of 50% to 65% of total revenues. Given the large 50% to 60% premium enjoyed by smoking rooms, it could reasonably be assumed that a significant percentage of these revenues would not have accrued if not for the presence of smoking-permitted rooms.

## Impact Analysis

Worldwide, the WHO notes that smoking is more prevalent in developing countries than in those that are developed. This difference is largely due to the ability of agencies to warn and educate the public as to the side effects that tobacco can have. In estimating the impact a potential smoking ban would have on a gaming facility, we have limited our analysis to developed markets.

Casino gaming is a leisure activity, and many gamers enjoy indulging in fine food, drinking, and smoking in conjunction with gaming. For many, these indulgences are occasional. This can be seen in many casino resorts, where the amenities surrounding casino floors include a disproportionate amount of fine dining options, spas, and retail shops relative to the environment in which most people live on a daily basis. Operators in Atlantic City estimate that one-third of their patrons smoke while gaming, 10% more than the WHO's 23.6% estimated nationwide prevalence.

Based on statistical regressions run in conjunction with the Ontario Gaming and Lottery Commission, The Innovation Group has determined that the central factors affecting the impact a smoking ban has on gaming revenue levels are: the incidence of smoking within the customer base and the existence of competitive alternatives that allow smoking on their casino floor. The estimated impact on the casino facility will follow a discussion of these two factors in light of the case studies and the subject facility.

## Smoking Prevalence and Impact Summary

A summary of the above smoking ban impacts is presented in the following table. All of the facilities detailed in the chart were experiencing growth prior to the institution of the smoking ban, and each experienced a drop in revenue following the ban. The second year following the ban reflect mixed results, with significant factors including the effects SARS had on travel in southeast Asia, the degree of competition, and the price of fuel at the time.

Information on the incidence of smoking is also presented to provide a guideline of the incidence of smoking and the degree to which individuals smoke. As can be seen,

although the United States has a low incidence compared to many countries, its smokers smoke more cigarettes annually than any others.

### Summary of Smoking Ban Impacts

		Gaming Revenue Impact (YOY) <sup>1</sup>			Nationwide Incidence of Smoking <sup>2</sup>			Consumption per Smoker (pieces) <sup>3</sup>
Location		Growth Rate Prior to Ban	First Year Impact	Second Year	Total	Male	Female	
Delaware	Wilmington	4.1%	-12.8%	11.0%	23.6%	25.7%	21.5%	4,938.3
Delaware	Dover	9.1%	-9.9%	13.6%	23.6%	25.7%	21.5%	4,938.3
Delaware	Harrington	15.0%	-9.3%	6.7%	23.6%	25.7%	21.5%	4,938.3
Australia	Burswood	9.6%	-3.9%	1.5%	19.5%	21.1%	18.0%	4,951.1
Canada	Sydney, NS	2.2%	-26.0%	N/A	25.0%	27.0%	23.0%	3,080.9
Canada	Stand-Alone	9.0%	-12.1%	5.9%	25.0%	27.0%	23.0%	3,080.9
Canada	Competition	6.7%	-14.4%	-0.6%	25.0%	27.0%	23.0%	3,080.9
New Zealand	Ashburton	2.0%	-25.0%	6.6%	25.0%	25.0%	25.0%	2,926.6
South Africa	4 locations				26.5%	42.0%	11.0%	2,276.2
Australian Tourism Sources								
	China				35.6%	66.9%	4.2%	2,468.9
	Singapore				15.0%	26.9%	3.1%	4,249.9
	Malaysia				26.4%	49.2%	3.5%	3,713.7
	Thailand				23.4%	44.1%	2.6%	2,140.3
	Indonesia				31.4%	59.0%	3.7%	1,769.5

1) Revenue figures according to public reporting agencies

2) World Health Organization: *The Tobacco Atlas*, 2002

3) World Bank, United States Department of Agriculture. Pieces refer to the number of cigarettes.

Specifically, the statistical analysis completed by the Federal Reserve on Illinois casinos and the experiences in Nova Scotia and Ontario indicate that casinos that are subject to competition are susceptible to greater revenue impacts when compared to markets with less competition. These impacts indicated a 26% decline in revenue in Halifax, Nova Scotia, a 20% decline in the Chicago area, and a 14% decline in Ontario. In addition, whereas revenue levels in Delaware largely recovered a year later, markets subject to competition appear to have slower recoveries. Comparisons of the levels of competition in these markets, the varying tax and revenue sharing structures, and the established competition that permits smoking in southern New England, The Innovation Group believes that the impact of a smoking ban in Massachusetts would likely be at the high end of this range, between 18% and 26%.

In Halifax, Nova Scotia, a designated smoking area appeared to largely mitigate the effects of a smoking ban by including 25% of the casino floor. Other jurisdictions, including Rhode Island and some facilities in Pennsylvania have adopted similar parameters to allow casinos to continue to serve all of their customers. In addition to Rhode Island, smoking is permissible at Native American facilities in Connecticut also permit smoking on their casino floors and will thus subject Massachusetts properties to

competitive pressures for customers that prefer to smoke while they are gaming. **In estimating gross gaming revenue in Massachusetts, The Innovation Group assumed that smoking would be permitted on 25% of the casino floor. Should smoking not be permitted on the casino floor, it is likely that gross gaming revenue could be impacted similarly to the examples provided herein.**

# POTENTIAL IMPACT OF CASINO GAMING ON THE MASSACHUSETTS LOTTERY

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## *Introduction and Approach*

As a part of The Innovation Group's analysis of the possible introduction of gaming in Massachusetts, we have assessed the potential impact of casino gaming (including race track slot operations) on the Commonwealth's highly successful lottery. We completed our review in order to estimate the potential range of impacts under a variety of alternative gaming scenarios that were analyzed in our overall study. We recognize the historical significance of the Massachusetts lottery, which has operated for over 30 years, now generating consistent sales above the \$4 billion mark and annual income to the state in the \$900 million range. Dependence on this revenue stream has logically raised the question of what cannibalization might take place with the introduction of casino gaming.

The effect of casino gaming on state lotteries has been of great interest to states contemplating the addition of gaming, beginning with the first wave of industry expansion in the early 1990's. Since that time there has been substantial research on the topic, with a degree of progress in identifying certain trends. However, results have been largely inconclusive for the main following reasons:

- Lottery sales can vary widely from year to year based on the addition of new games, which can mask or exaggerate business trends.
- Macro-economic influences are difficult to isolate.
- The distribution of impacts and their relation to the proximity of lottery customers to casinos are not well understood.
- The timing of the introduction of multiple casinos into the market, in different locations over time, further complicates analysis.

Despite the ambiguities arising from these factors, some vague trends have been cited in past research. Taking the experience of multiple state's into account, and a variety of sources of analysis, the following has been observed:

- At least some states have shown a marked decline in lottery sales and/or lottery sales growth rates immediately following the introduction of casinos.
- Among those showing declines, several have shown signs of recovering as early as one or two years following the introduction of casinos.
- There are states that have not experienced a decline in lottery sales coinciding with the introduction of casinos, with some actually exhibiting sustained rates of growth.

This portion of our analysis is organized into several key sections. First, we will provide an overview of the Massachusetts lottery including a discussion of historical revenue and growth trends, growth rates, and unique factors in addressing the Massachusetts lottery. Next, key lottery markets where casinos have been introduced will be assessed. The purpose of this portion of the assessment will be to establish trends that occurred prior to the introduction of casinos and compare them to trends that occurred subsequent to the introduction of casinos. These findings will next be compared to a control group of states with lotteries that have not introduced casino gaming, to insure that the impacts identified as casino impacts are primarily attributable to the emergence of casinos. Next, using the analysis described above as a basis, the potential range of impacts of casinos on the Massachusetts lottery will be projected. The Massachusetts impact will be projected for three development scenarios: (1) Assuming casinos are introduced in both the eastern and western portion of the state (correlating to Scenarios 2 and 3), (2) assuming casinos are only introduced in the eastern portion of the state (correlating to Scenario 1) and (3) assuming that horse and former dog racing facilities are granted slot machines (correlating to Scenario 4).

## *Overview of Massachusetts Lottery*

Since its inception in 1971 and first game being offered to the public in the form of “The Game” in 1972, the Massachusetts lottery has continuously created innovative games, such as having the first latex covered instant game, one of the first daily number games, and a numbers game telephone betting system. While lottery operations were terminated in the 1970’s due to a lack of interest, the Massachusetts lottery reinvigorated the programs with the introduction of Megabucks in November of 1982. Introduction of the Big Game, the predecessor to Mega Millions, occurred in September of 1996 and gave Massachusetts players access to a multi-state lottery with significantly larger jackpots due to the increased number of players. Powerball, another large jackpot multi-state lottery, was recently added and began contributing to revenue figure in FY2010.

## **Historical Revenue**

Lottery revenue has grown on average 2.9% annually from 2000 to 2009. This has propelled revenue from \$3.7 billion in FY2000 to over \$4.4 billion in FY2009. Year over year change on a percentage basis has show noticeable fluctuation as figures range between a 7.1% increase from 2001 to 2002 to a 5.6% decrease from 2008 to 2009. Average annual growth (“A.A.G.”) in Net Profit has been 0.1% from 2000 to 2009. Over that period, Net Profit grew from \$853 million to \$859 million and peaked in 2006 at \$951 million. Growth fluctuations were similar to that of revenue.

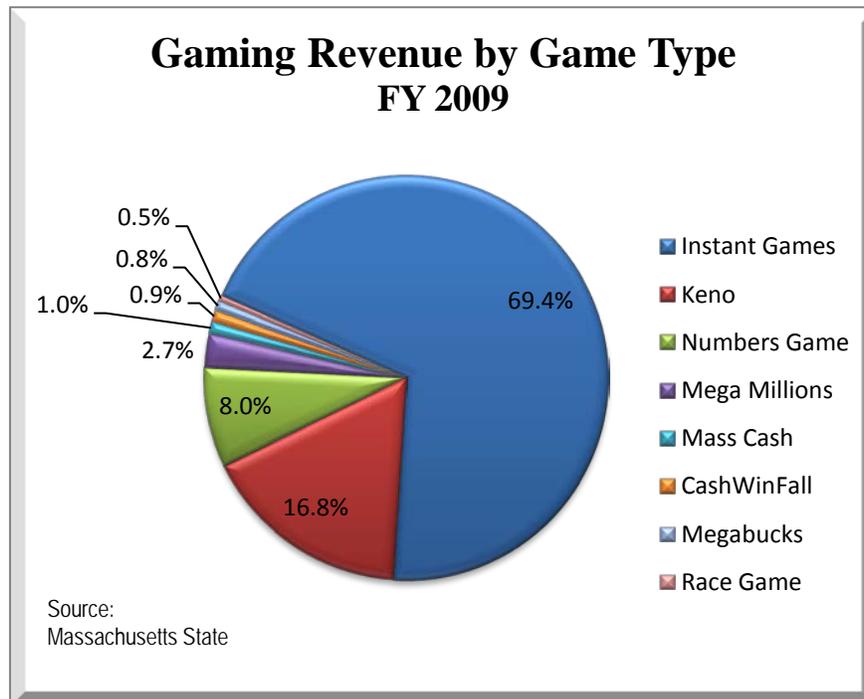
### Massachusetts Historical Lottery Statistics

Year	Revenue (Millions)	% Change YoY	Net Profit (Millions)	% Change YoY
2000	\$3,716		\$853	
2001	\$3,936	5.9%	\$864	1.3%
2002	\$4,213	7.0%	\$899	4.0%
2003	\$4,205	-0.2%	\$889	-1.1%
2004	\$4,382	4.2%	\$912	2.5%
2005	\$4,483	2.3%	\$936	2.6%
2006	\$4,524	0.9%	\$951	1.6%
2007	\$4,461	-1.4%	\$892	-6.2%
2008	\$4,709	5.6%	\$913	2.3%
2009	\$4,443	-5.7%	\$859	-5.9%
A.A.G.2000-2009		2.0%	0.1%	

Source: Massachusetts State Lottery

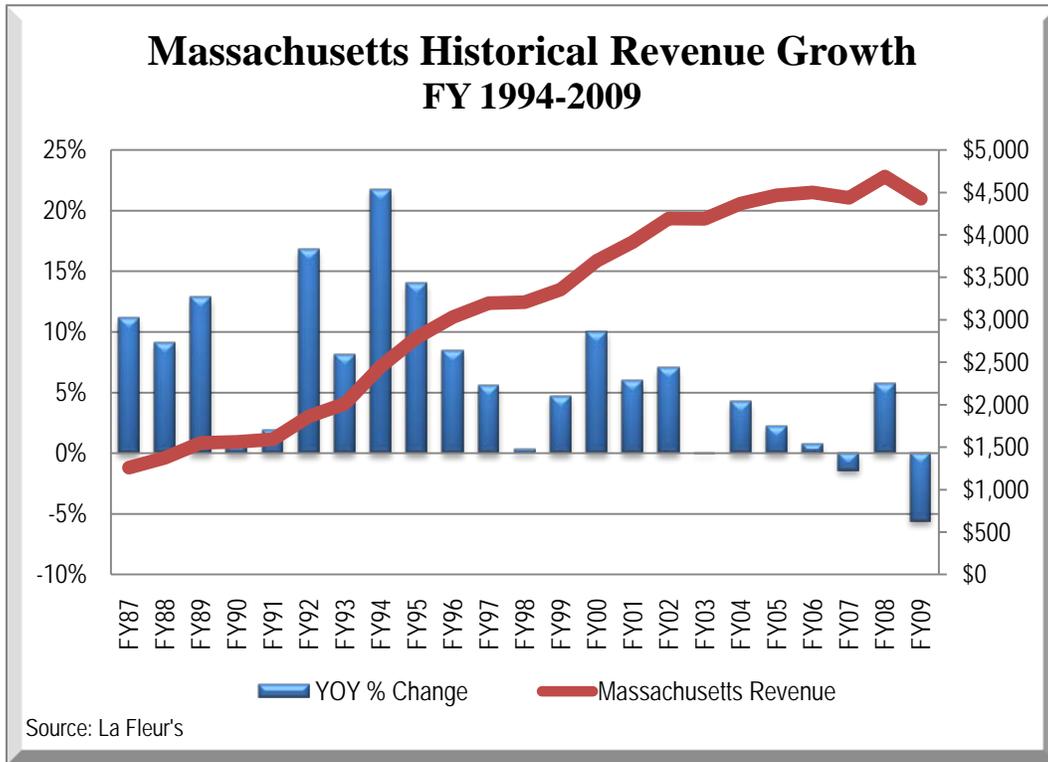
### Distribution

Revenue, on a percentage basis of total revenue from lottery games, is shown in the chart below. The chart clearly shows that the vast majority, nearly 70%, of all game related revenue is derived from instant game sales. Keno makes up the second largest portion of game based revenue at approximately 17% of total game related revenues. These games allow consumers to know instantly, or near instantly, if they have won or lost and provided on demand excitement. In addition, despite having lower prizes, gamers can play as often as they wish without having to wait for numbers to be drawn either once a day or twice weekly as occurs in games such Mega Millions.



## Historical growth

The chart below shows the historical year over year growth for the Massachusetts Lottery, along with lottery revenue itself. From FY1986 until FY2002 revenue from the lottery continued to grow positively. The first year of lottery decline occurred in FY2003 which saw a 0.1% decline from FY2002 revenues. Since that time, revenue growth has continued to be muted in comparison to growth occurring in the 1990's and early 2000's.



## Unique Aspects of the Massachusetts Lottery

The Massachusetts Lottery has both tangible and intangible attributes that set it apart from other lotteries around the country. While the Massachusetts Lottery is not the largest lottery in the US in terms of revenue, it is one of the largest with over \$4.4 billion in FY09. The large revenue for Massachusetts has been driven by a high per capita spend. The chart below shows per capita revenue figures for Massachusetts and other states.

### Per Capita Lottery Revenue By State

State	FY 2009
Delaware	\$793.37
Massachusetts	\$671.18
New York	\$391.99
Connecticut	\$281.76
Pennsylvania	\$245.00
Missouri	\$161.74
Illinois	\$160.89
Indiana	\$114.07
Iowa	\$80.90

Source: US Census Bureau, Le Fleur's

The Massachusetts's lottery has valuable intangible characteristics as well that that have helped it to become one of the largest and most successful lotteries in the country. Innovative games and platforms have been at the forefront of the Massachusetts Lottery. Massachusetts pioneered the scratch-off ticket and offered some of the first online and phone lottery services. Additionally, it was one of the first states to introduce The Big Game, the predecessor to Mega Millions. This ability to offer enticing lottery games should give the lottery an edge in responding to the emergence of casinos, relative to what other lotteries have done as casinos have come on line.

### *The Impact of Casino Gaming on Lottery Performance*

The following section examines the impact of casinos on lottery performance by examining lottery revenue trends before and after the introduction of casinos into several states. First historical revenues will be assessed by state, followed by a review of a control group of non-casino states. Finally, any identifiable trends in lottery sales following the introduction of casinos shall be analyzed.

### **Historical Impacts by State with Casinos**

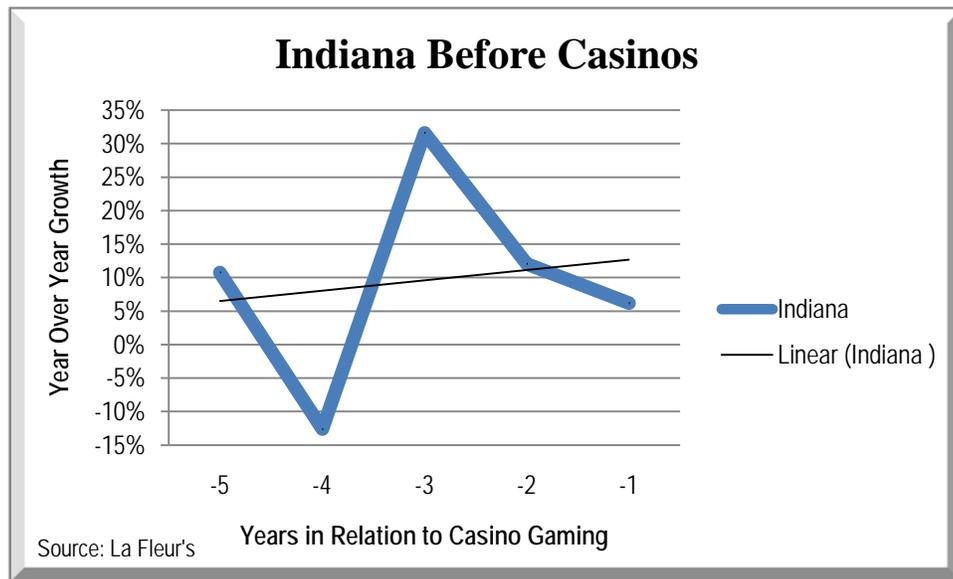
The aim of this section is to understand the trends in lottery revenues directly before and after the introduction of casinos into the market, which will in part instruct the impact we assign to casinos in Massachusetts. The below charts show the year over year growth percentage for a cross-section of lottery markets where casino gaming was introduced, based on a timeline of five years before (-5) to five years after (5) the introduction of casinos. Linear trend lines were used to assist in the interpretation of trends occurring in each of the selected markets.

We would note that growth rates, not revenue itself, were used as the basis of this portion of the analysis. This is because in many circumstances growth continued as casinos were added to the market, albeit at a lower rate of growth. As such, the impact of casinos, which can be limited in terms of a lasting effect, could be missed on a pure revenue comparison. Therefore, by looking at growth, we are able to observe small changes in lottery behavior and better understand the impact of casino gaming in isolation of secondary impacts such as macro-economic phenomenon and new lottery game introductions.

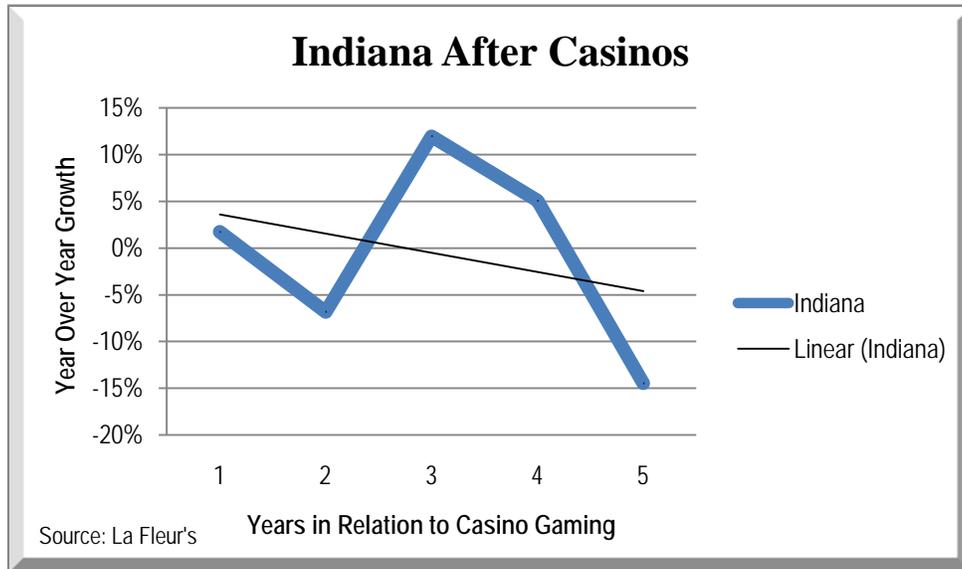
In addressing the below markets we would point out that a variety of factors influence growth trends in addition to casino gaming. Fluctuations resulted from macroeconomic trends, new games introductions, competitive factors from surrounding states, and other influences.

## Indiana

Prior to casinos entering Indiana, the trend for year over year lottery revenue change was positive. The trend line on the chart below demonstrates a positive linear growth occurring from Year 5 prior (-5) to Year 1 prior (-1). This positive linear trend occurs despite volatility in year over year increases in declines.

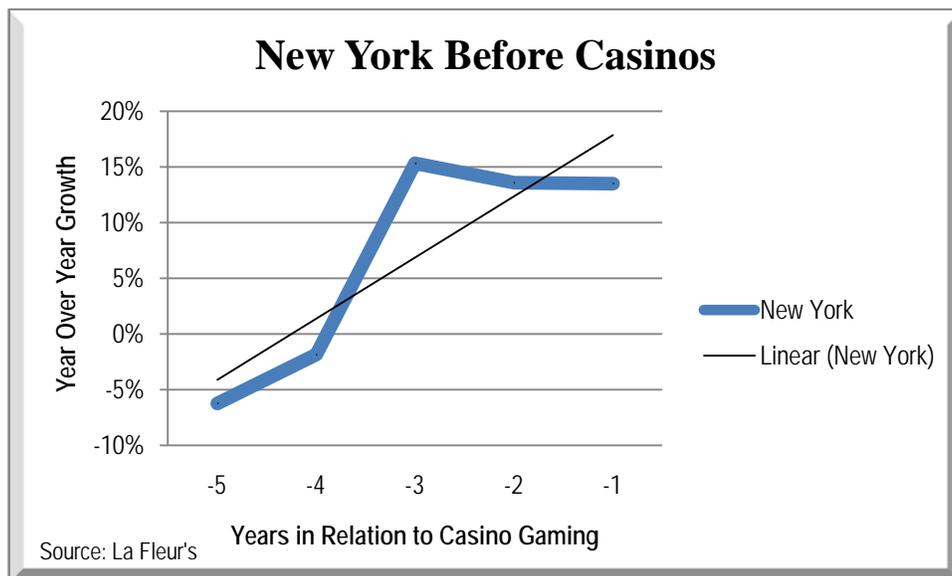


Following the introduction of casinos into the Indiana market, the slope of the linear trend line for revenue growth changed from positive to negative. The chart below shows that following the introduction of casinos Year 2 and Year 5 both saw negative growth rates.



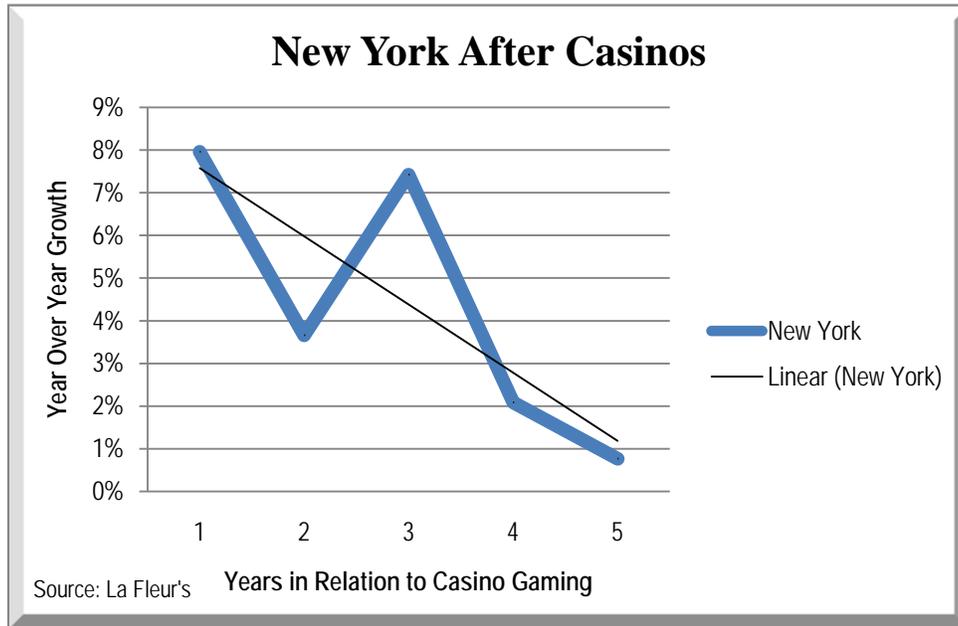
### New York

While New York had Native American casinos for a number of years prior to their introduction of VLT's, these casinos were far removed from the populated areas of the state. Thus, due to travel requirements, they did not have the same daily effect on a large percentage of the population as did the introduction of VLT's. We, therefore, considered the introduction of VLT's in 2004 as the appropriate starting point to examine the five years prior to and five years after the introduction of casino style gaming. New York shows a positive trend in growth from five years prior to the casinos introduction.



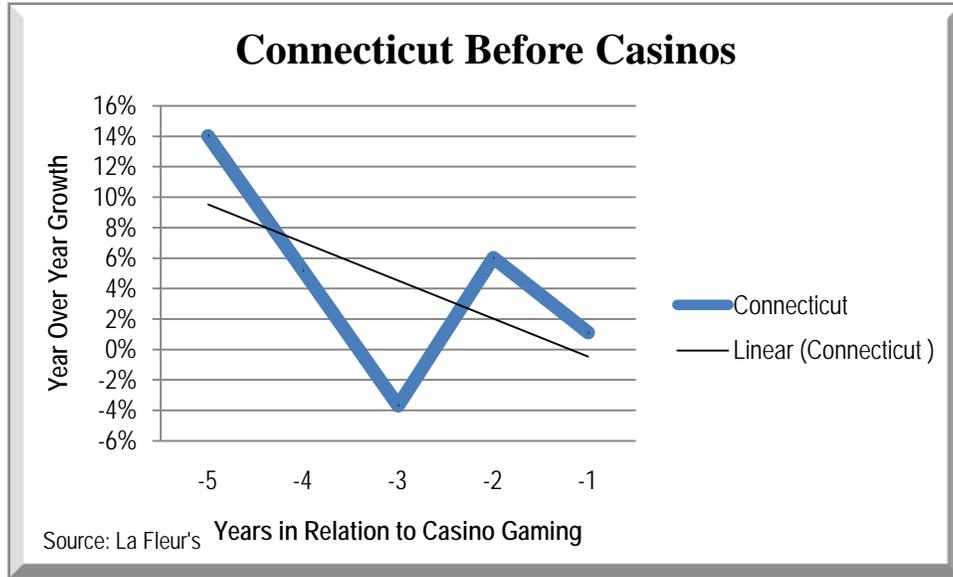
The chart below shows that after the introduction of VLT's in New York at the Saratoga Gaming Raceway in 2004, lottery revenue growth experienced a general decline. Revenue growth went from 8% the year that VLT's were added to less than 1% in Year 5 as pari-mutuels continued to come on line as Saratoga was followed by six other racinos,

opening between early 2004 through October 2006: Finger Lakes, Batavia Downs, Buffalo Raceway, Monticello Raceway, Tioga Downs, and Yonkers. In May 2007, Vernon Downs opened just south of the Oneida Turning Stone Casino Resort. Notably, revenue has not recovered to the growth rates seen prior to the introduction to VLT's and it is difficult to tell when this will occur given New York's position on expanding VLT's.

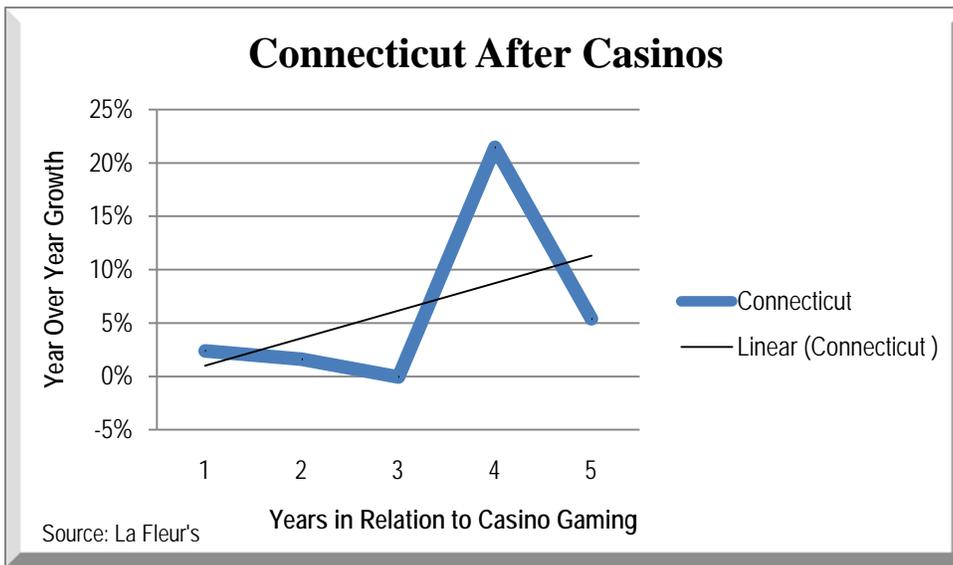


## Connecticut

The emergence of casino gaming in Connecticut at Foxwoods in 1992 marks the -5 year market for tracking lottery impacts in the state. Five years prior to the introduction of casinos, Connecticut experienced strong year over year lottery revenue growth. This growth continued to year -4 and saw a small decline in year -3. Lottery revenue rebounded in year -2 and year -1. Thus linear growth of the Connecticut lottery market shows a decline prior to the introduction of full scale gaming at Foxwoods Casino.

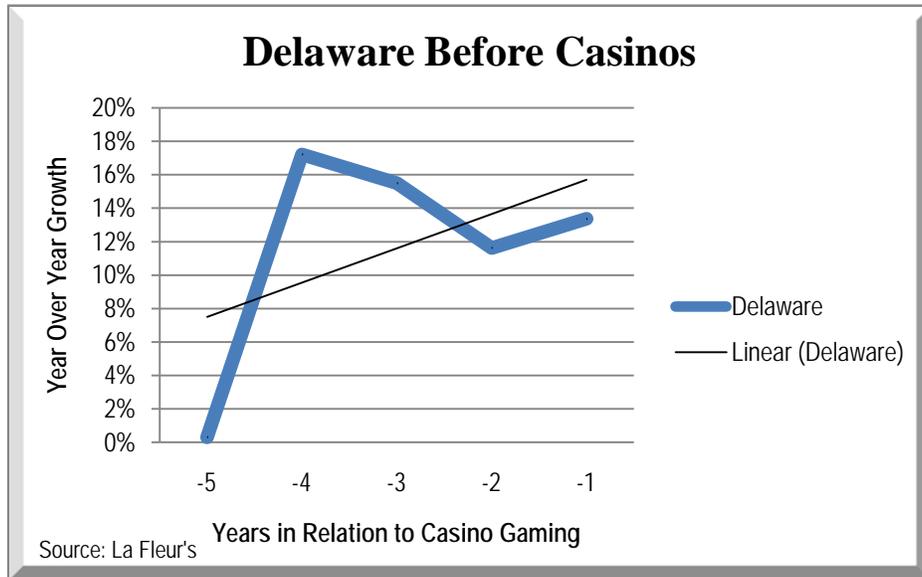


For the five years following the introduction of full scale gaming at Foxwoods, lottery revenue showed minimal linear growth. This was supported by strong year over year growth in the third and fourth years after Foxwoods opened and limited growth in year 5.

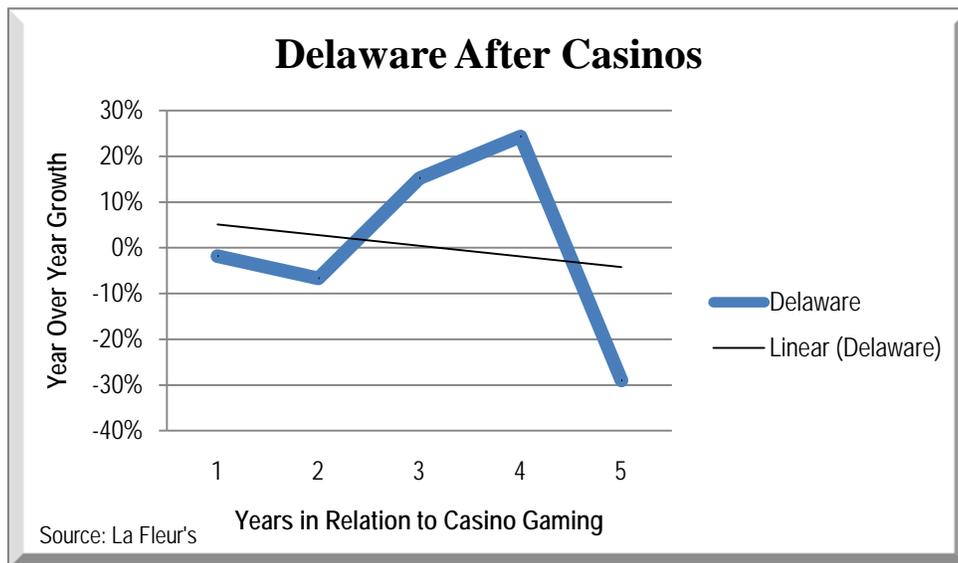


## Delaware

Five years prior to the introduction of VLT's in Delaware in 1996 at three racetracks lottery revenue was experiencing strong growth. This is supported by double digit year over year growth in years -4 through -1.

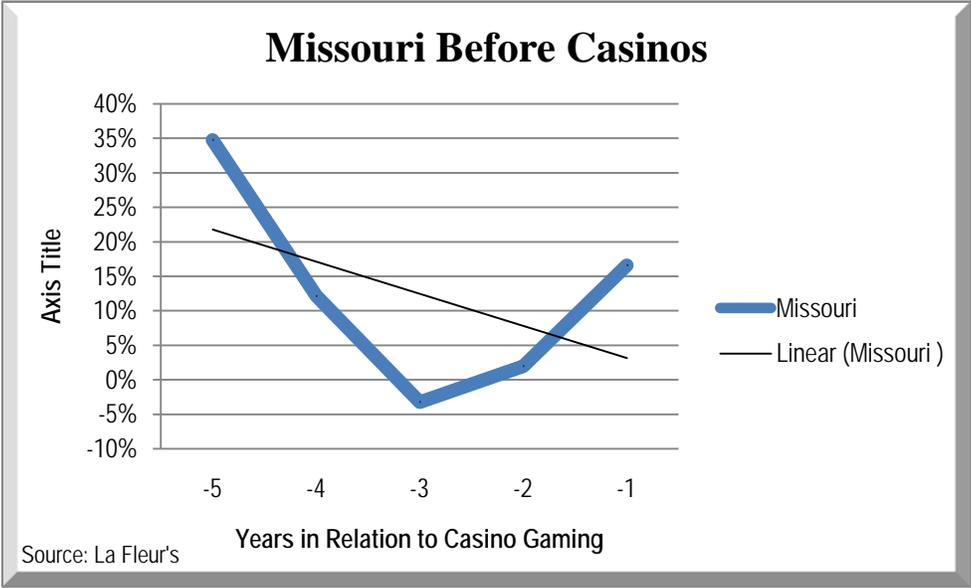


In the five years after VLTs were installed at the three tracks, lottery revenue declined as illustrated by the negative linear growth in the chart below. While a linear decline was experienced over the five year period, lottery revenue did experience positive year over year growth in years three and four. Year 5 showed a drastic double digit decline.

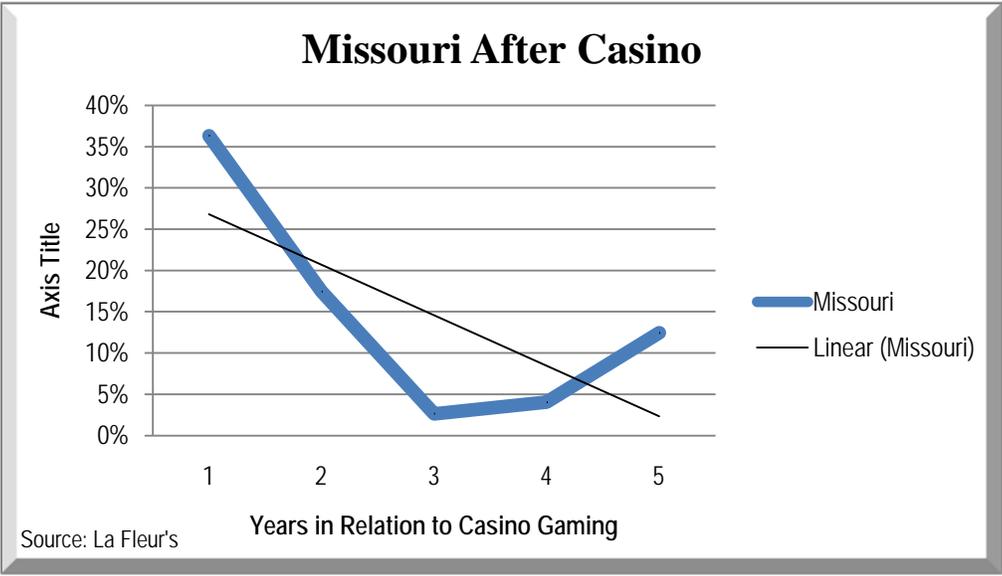


## Missouri

In 1993 four riverboats were opened throughout the State of Missouri. In the five years prior to the introduction of full scale gaming, lottery revenue experienced a minimal linear decline. Year -5 showed the most drastic growth with 35%, while, years -4 and -3 showed decreased growth and decline with 12% and -3.2% growth respectively. Years -2 and -1 rebounded.

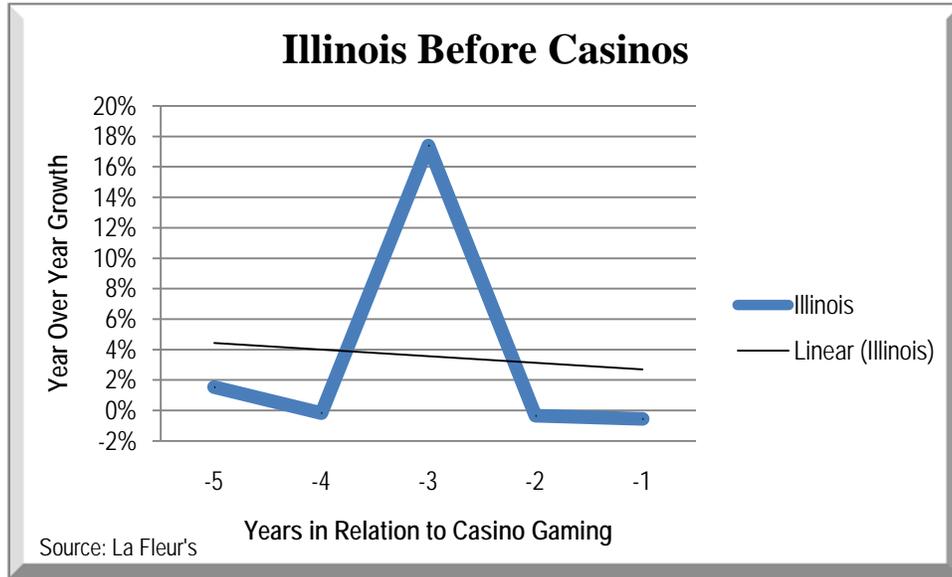


In the five years following the introduction of the initial four riverboats, Missouri continued to issue licenses and the market grew to 11 riverboats throughout the state. During this time, while lottery revenue showed positive year-over-year growth, the rate of increase year-over-year was declining. In the first year after the introduction of the first four riverboats, lottery revenue showed over 35% year over year growth. This growth rate was not sustained, but in years 2, 3 and 4, the lottery revenue showed approximately 20%, 3% and 4% year over year growth respectively, declining from the year 1 peak.

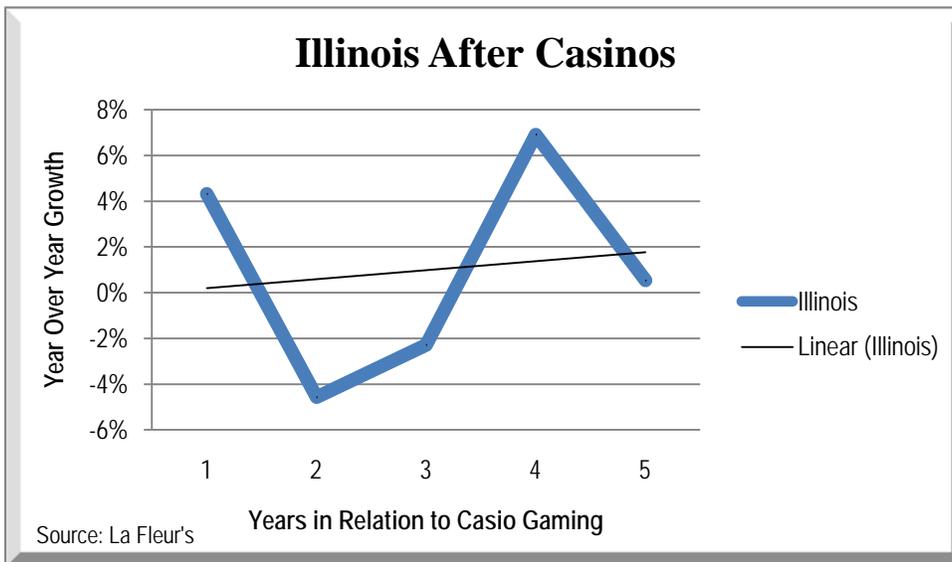


## Illinois

Illinois introduced riverboat gaming in 1992. In the five years prior to the introduction, lottery revenue showed declining year over year growth. While there was a steep increase in year -3, the overall trend for the market had shown limited average year over year growth.



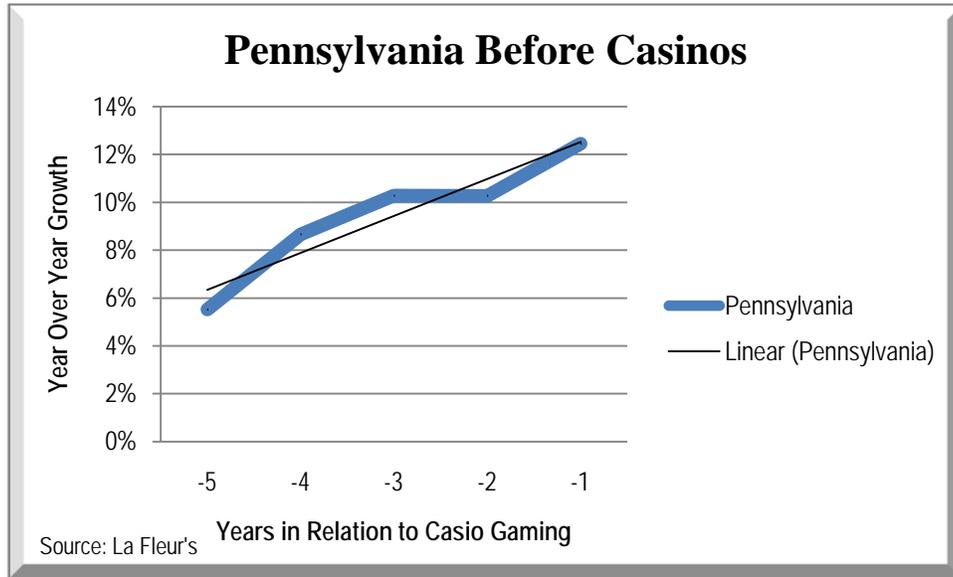
For the five years after the introduction of the first riverboat casino in Illinois, lottery revenue showed minimal year over year growth. In years -2 and -3 there were declines in lottery revenue and minor rebounds in years -4 to -5.



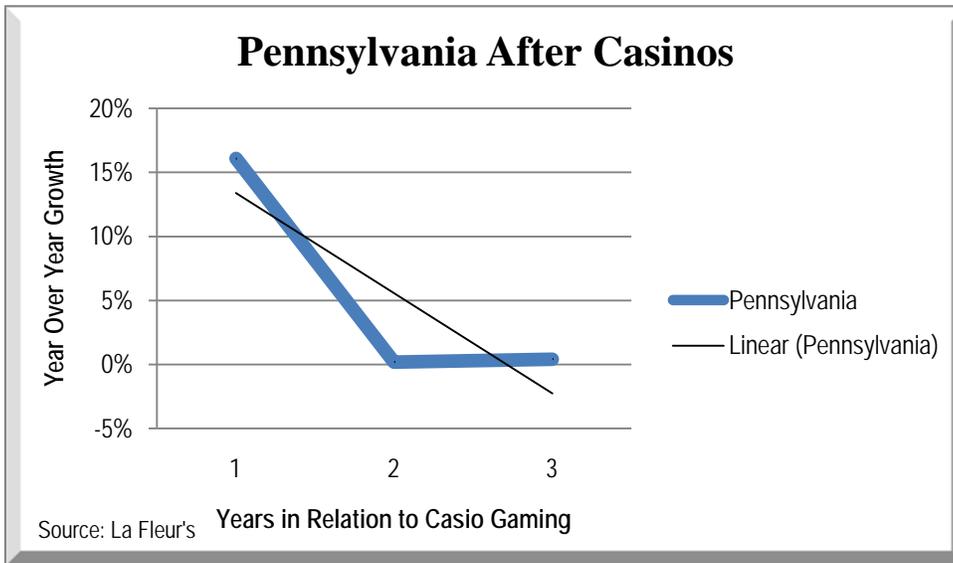
## Pennsylvania

Pennsylvania introduced slot machine gaming into the state in late 2006. For the five years prior to the introduction of gaming, lottery revenue experienced increasing year

over year growth. This positive linear growth was sustained for all five years. Years -2 and -1 showed double digit growth year over year.

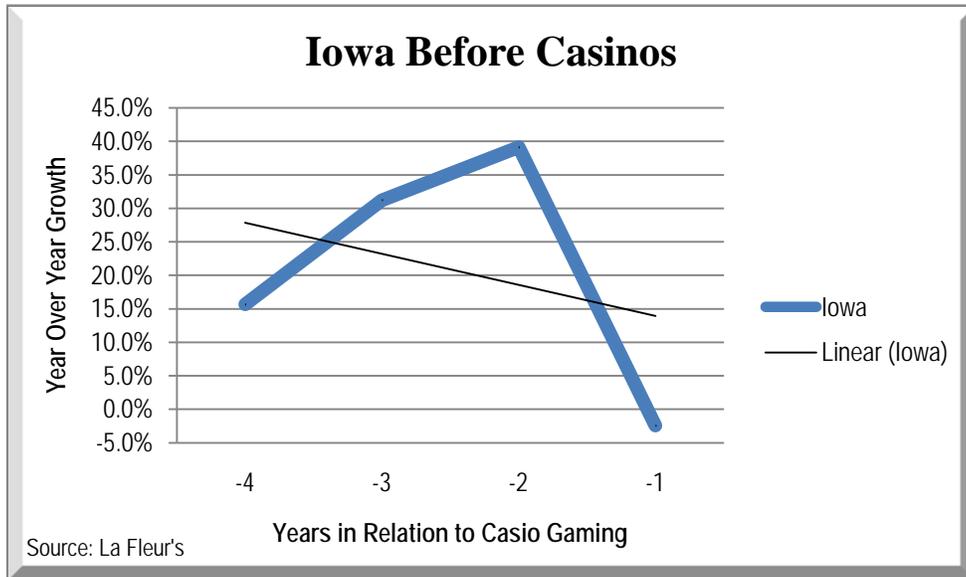


In the three years following the introduction of slot machine gaming, lottery revenue experienced declining year over year growth. There was a sharp decline in between year one and two which was followed up by a plateau between years two and three.

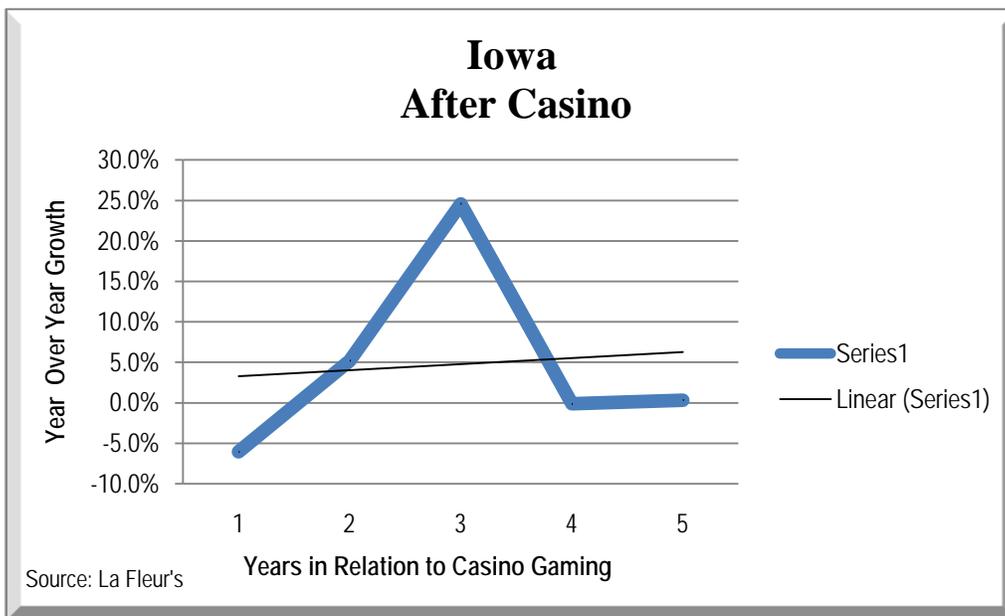


## Iowa

Iowa introduced lottery gaming only a few years prior to the introduction of riverboat gaming. In those four fiscal years, lottery revenue experienced dramatic year over year growth followed by a decline and showed a negative linear pattern.



In the first year after riverboat gaming was introduced, lottery revenue experience a slight decline only to rebound in years 2 and 3. The rebound was not sustained as revenue growth slowed in years 4 and 5 after the introduction of riverboat casinos. Throughout the five year period, revenue growth showed a slight linear increase.



The charts above are evidence of the fact that after the introduction of casinos, there was, in certain cases, a negative effect on the year over year growth rates of lottery revenue. It is important to note that this did not occur in all test cases. Certain states, such as Connecticut, actually saw revenue growths increase after the establishment of casinos in the state. As a result of these mixed results we must recognize the possibility that the introduction of casinos may have a minimal impact on lottery sales. By way of

conclusion, we have identified that the following states saw definitive growth declines in the lottery following the introduction of casinos. These states include Indiana, New York, Delaware, Illinois, and Pennsylvania.

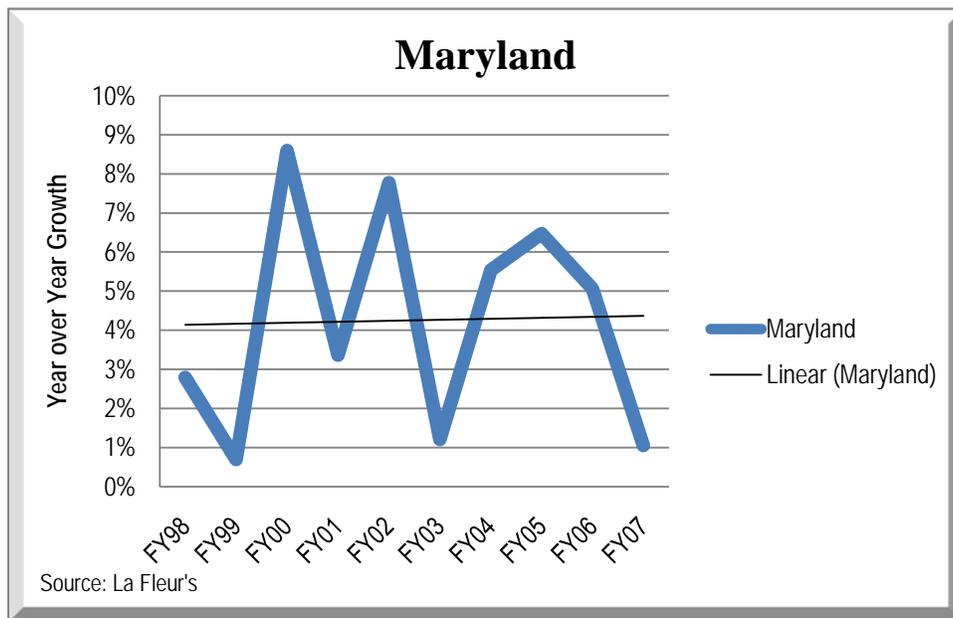
### Revenue Growth for States without Casinos

The following states were chosen as a control group, representing examples of how states without casinos have fared from FY98 through FY07. These states were selected as the control group based on their isolation from casino style gaming in the form of either tribal casinos or commercial casinos. With the increase in the number of states offering one or both styles of gaming, identifying states that had not been affected by casino gaming has become more challenging. As such, the “control group” must be observed with the understanding that none of these states is completely insulated from competitive casino gaming opportunities.

The selected states include Maryland, Vermont, Georgia and Virginia. With the exception of Georgia, each state generally shows an increasing growth rate trajectory. This trend validates the “control group” position that absent of the introduction of casino gaming, lottery markets tend to exhibit linear growth over time. Each market is presented in a linear graph below tied to the relevant period representing natural growth (or declines) unrelated to casino development.

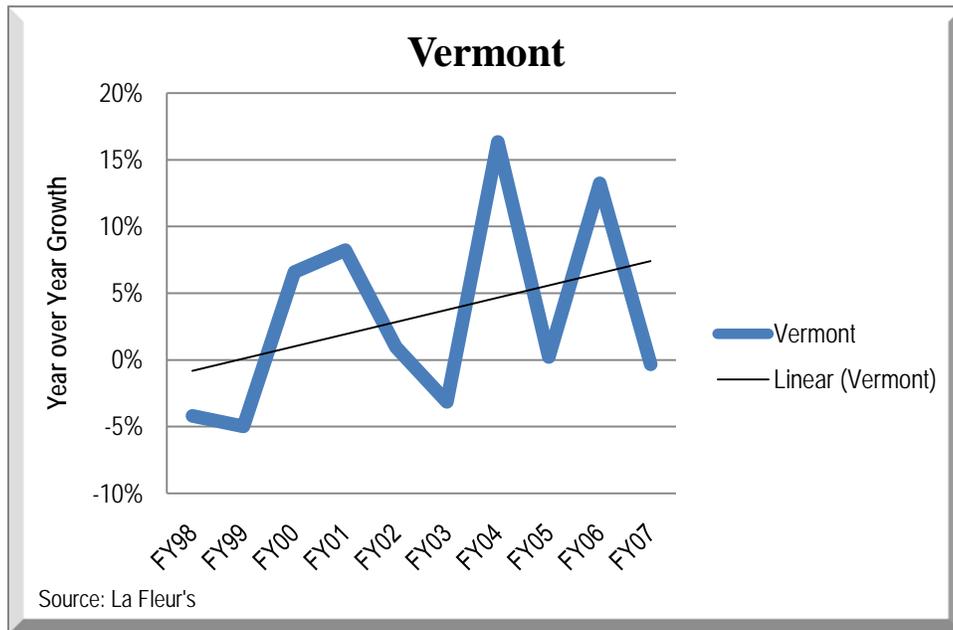
### Maryland

Revenue growth for Maryland was wildly inconsistent year over year. Change in revenue ranged from less than 1% to more than 8%. Notably, however, change was always positive and on the whole, as displayed by the trend line was slightly positive.



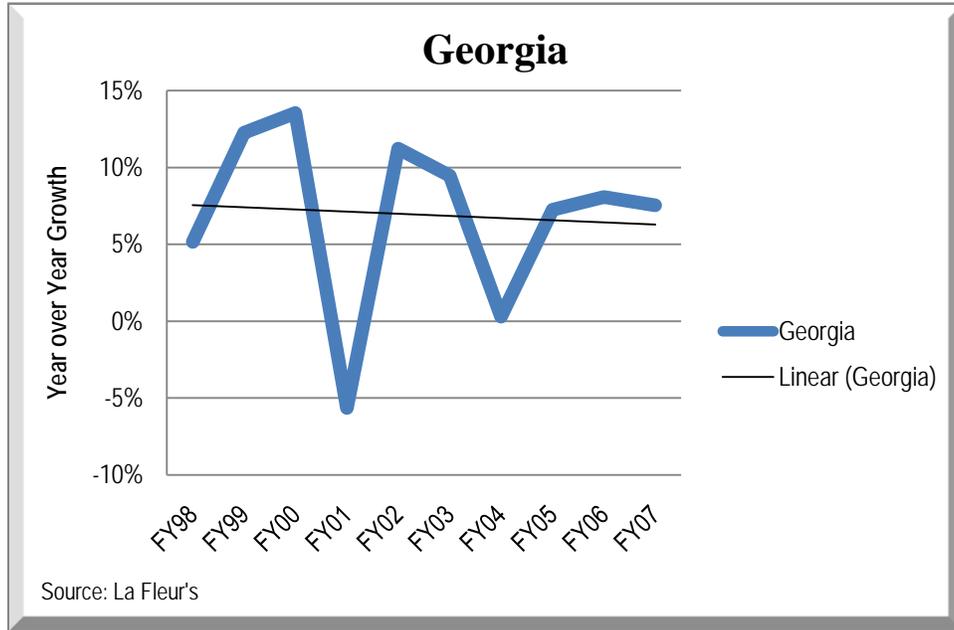
## Vermont

Vermont has showed a slightly positive linear growth but year to year growth rates fluxed heavily. Negative growth occurred in three out of the ten years examined despite the overall positive movement of growth occurring in the market.



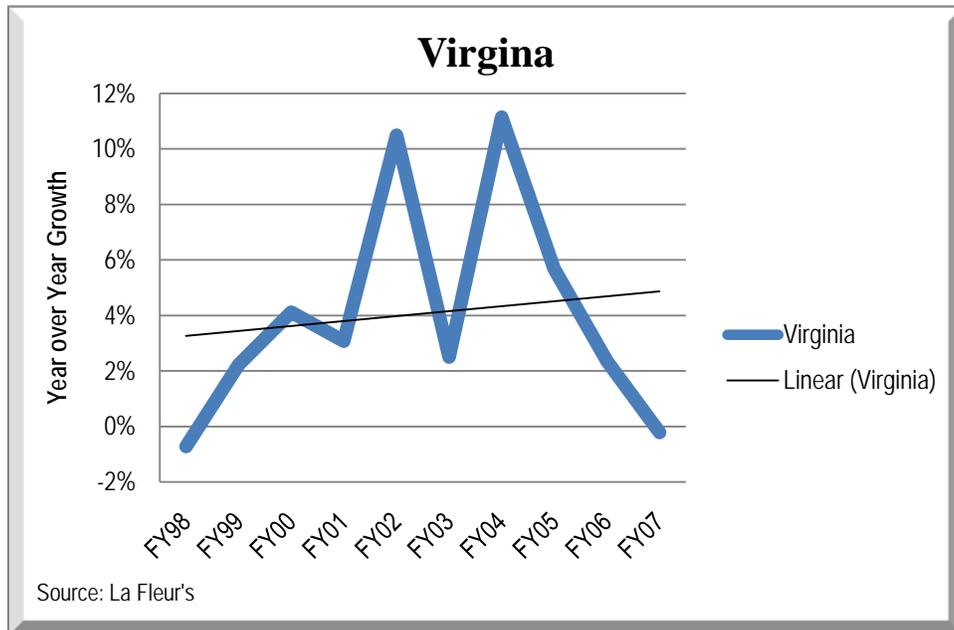
## Georgia

Georgia saw negative growth in only one of the ten years examined. As a result, the linear growth rate for the state was negative, the only negative linear rate for any of the researched states. This negative pattern to growth in gaming may have occurred because of poor game management and creation, one of the most important factors in revenue growth.



### Virginia

Virginia, like Vermont had a positive linear association of growth rates year to year. Like the three states discussed prior, Virginia saw large fluctuations in growth as years of large growth were often followed by smaller growth.



As these four states show, fluctuation in growth rates is a normal occurrence over time. However, with the exception of Georgia, year over year growth was positive and demonstrates that these markets, without the introduction of gaming alternatives such as casinos, have continued to experience increased growth rates and thus higher lottery revenues.

## Interpretation of Historical Trends

The culmination of our assessment of historical trends includes an interpretation of the impact of casinos on lottery states with casinos, and the control group of lottery states without casinos, to establish patterns that might be relevant to the potential impacts in Massachusetts. We should begin by reiterating that the control group on the whole showed growth without the influence of casinos. In essence this supports the notion that declining states with casinos owe precipitous declines to the advent of casino gaming, barring any market-specific influences that can be easily identified. With that, we can turn to an analysis of impact of the introduction of casinos on lotteries in states showing declines: Indiana, New York, Delaware, Illinois, and Pennsylvania.

The following table summarizes the trends experienced for states showing a decline in lottery growth following the introduction of casinos. These states saw meaningful declines in their average growth rates for five years after the introduction of casinos when compared to the average growth rate for the five years before the introduction of casinos.

**Growth Rate Changes in States Experiencing Declines Post Casinos**

State	Average Growth Before Casinos (Five Years)	Average Growth After Casinos (Five Years)	% Change
Indiana	9.6%	-0.5%	-105.2%
New York	6.9%	4.4%	-36.2%
Delaware	11.6%	0.4%	-96.4%
Illinois	3.6%	1.0%	-72.6%
Pennsylvania	9.4%	5.6%*	-41.0%

\*For three years after

Source: The Innovation Group

Indiana saw the largest decline in terms of their average growth rate. Delaware saw a decline in growth of similar magnitude as average growth after the introduction of casinos was down approximately 96%. States such as Pennsylvania and New York, which have more recently established casino gaming, have only seen declines in their rate of growth of 41% and 36.2% respectively. It is possible that Pennsylvania could see more negative changes in lottery growth as current figures represent only three years following the introduction of casinos to the state. We would point out that states with larger lotteries in terms of total revenue, Pennsylvania, with lottery revenue of over \$3 billion and New York, with lottery revenues over \$7.6 billion, were less affected. We believe this is due to their diversified products that were more resistant to change than smaller lotteries in states such as Indiana, which had less than \$735 million in lottery revenue for 2009.

## *Forecasting the Impact of Casinos on the Massachusetts Lottery*

This section will provide the basis for, and a projection of, the possible impact of the introduction of casinos on the Massachusetts Lottery. First, we will establish the

appropriate metrics by which to measure impacts, and then provide a forecast for impacts under four main scenarios: (A) no impact of casinos on lottery growth rates; (B) impact with casinos being introduced in the three defined regions in the state (correlating to Scenarios 2 and 3); (C) impact should casinos only be introduced in the eastern portion of the state (correlating to Scenario 1); and (D) impact should horse and former dog racing facilities be granted slot machines in addition to one casino in each of the three defined regions (correlating to Scenario 4). Each scenario will be described in further detail later in this section.

## Possible Approaches to Forecasting Impacts

Having established the nature of declines in lottery sales in states affected by casinos, an approach to forecasting possible impacts in Massachusetts must be established. The Innovation Group considered two main factors in addressing the projections: (1) The multi-year trajectory of decline in growth rates described in the prior section; (2) A more immediate year-over-year decline in actual revenue (versus growth rates) in states as experienced in each year following the introduction of casinos.

## Summary Impact of States Showing Declines

The chart below is an assessment of impacts in those states which saw direct revenue declines for the years following the induction of casinos into the state. These three states, Indiana, Illinois, and Delaware each witnessed either small growth or decline in year over year revenue from the first year a casino was operational (noted on the chart as introductory year). Notably, with the exception of Illinois, these were all small lotteries in total revenue. This may explain why Illinois saw the largest year over year growth in the introductory year and the smallest decline in revenue in Year 2.

More important, however, than a single market, is the aggregate experience of the three states post the introduction of casinos. Where as many of the states experiencing declining growth trends after the introduction of gaming showed fluctuation, three states, identified below, showed remarkably similar patterns of decline and rebound in response to the legalization of casino gambling. As the below chart shows, Year 2 saw very similar decreases in revenue. The range for decline in this year was 2.2%, remarkably small in comparison to revenue changes in other years. Year 3 saw a rebound for Indiana and Delaware, of 15.2% and 12.0%, respectively. Noticeably, markets which saw two years of decline from the introduction of casinos were also those to see the largest growth in Year 4. Year 5 shows nominal movement in Illinois and Delaware, but a 14.5% decline in Indiana, potentially connected to its second wave of casino openings, primarily in the Chicagoland market.

**Effects of Casino Introduction by Year for Select States  
(Year Over Year Growth)**

State	YOY Growth In Introductory Year	Year 2	Year 3	Year 4	Year 5
Indiana	1.7%	-6.8%	12.0%	5.1%	-14.5%
Illinois	4.3%	-4.6%	-2.3%	6.9%	0.5%
Delaware	-1.8%	-6.7%	15.2%	24.3%	-0.5%

Source: The Innovation Group

The clear patterns of decline and recovery experienced in these states, which represent both small and large lotteries, could be informative in projecting the possible impact of casinos in Massachusetts, if a negative impact is in fact experienced at all. The section below further details the possible impact of casinos on lottery revenue.

**Impact Projections for Massachusetts**

The following section outlines our projection of the potential impact of casinos on the Massachusetts lottery. Again, the four scenarios include: (A) No impact of casinos on lottery growth rates; (B) impact with casinos being introduced in the three defined regions in the state (correlating to Scenarios 2 and 3); (C) impact should casinos only be introduced in the eastern portion of the state (correlating to Scenario 1); and (D) impact should horse and former dog racing facilities be granted slot machines. Each scenario will be described in further detail later in this section.

Note: Lottery results are reported on a fiscal year basis. The Massachusetts Lottery’s fiscal year begins on July 1 and ends on June 30. Additionally, the start date for casinos being introduced into lottery markets in the above analysis varies within a given fiscal year. As a result, our analysis of the impact of casinos on lotteries homogenizes partial year impacts from several markets within what we have referred to as “Year 1”. Massachusetts casinos are projected in our analysis to begin operations on January 1, 2014. Thus, the impact of casinos on the Massachusetts lottery for FY2014 technically includes only six months of casino operations. Because the start dates of Year 1 impacts in the sample markets varied across a full year of lottery operations, we believe applying the annualized impact is appropriate.

**Senario A – No Casinos/No Impact**

As we have witnessed an absence of an impact from casinos on lottery revenues in several states, The Innovation Group has first addressed a scenario where Massachusetts does not introduce casino gaming and hence experiences no impact on the lottery. Projections for this scenario were based on a linear growth rate which took into account year over year growth from FY98 through FY09. The average growth rate for this period in Massachusetts was 2.9%. As a result of the ten year time period taken into account when calculating this growth rate, economic declines were mitigated by economic surges throughout the decade. Thus, this growth rate should accurately reflect future growth which could see either type of economic scenario.

The chart below shows FY09 numbers according to La Fleur’s 2010 Lottery Almanac. These figures were used in order to maintain consistency with figures used throughout the report. Projections based on the linear growth rate show revenue for the lottery reaching \$5.7 billion in FY18.

**Lottery Revenue Projections  
With No Casino Impact**

Year	Revenue (\$M)
FY09	\$4,425.5
FY10	\$4,553.5
FY11	\$4,685.3
FY12	\$4,820.9
FY13	\$4,960.4
FY14	\$5,103.9
FY15	\$5,251.6
FY16	\$5,403.5
FY17	\$5,559.9
FY18	\$5,720.8

Source: La Fleur’s, The Innovation Group

While much of this section has been dedicated to the effects of casino gaming on lotteries in states across the US, there is evidence that Massachusetts has the potential to see less significant impact from the advent of casino gaming. The basis of this argument, and thus, the likelihood of Scenario A, is that the Massachusetts lottery has one of the highest per capita lottery sales of any lottery we examined. In addition, Massachusetts has many other advantages that could insulate it from feeling the effects of casinos being added in the state, including a dynamic suite of games and innovative practices

**Scenario B - Impact Based on States Showing a Decline, Eastern and Western Casinos**

Scenario B explores the possibility that Massachusetts experiences a decline similar to those seen above which detailed four states showing year over year declines in revenue growth initializing in the year the casino opens. In this scenario the decline is driven by the availability of casino gaming in both the eastern and western portions of the state. The casino development assumption corresponds to Scenarios 2 and 3 as outlined in the Gaming Revenue Estimate section of our overall study

The table below outlines the potential pattern of loss and rebound in this scenario. In order to calculate this projected impact, we examined the loss and rebound of the four states shown above. Using the patterns established in Indiana, Illinois, and Delaware, we adjusted for factors that point to Massachusetts being a more resilient market, including its size, strength of lottery and creative and well managed product offering. What we have found, through our analysis of the various lotteries studied, is that the volume of revenue can potentially minimize deviations in year over year revenue change from the expected linear pre-casino growth rate. Thus, larger lotteries tend to exhibit less

elasticity than smaller lotteries. This can be seen in the less substantial declines and more subdued rebounds in states like Illinois versus smaller lotteries, such as Delaware, where fluctuations following the introduction of casinos were more volatile.

As a result of these findings, and given size of the Massachusetts lottery, we have adjusted the average decline and extent of rebound seen in the observation group for Year 2 and Year 4 respectively. These adjustments in growth rates resulted in a forecasted decline of 5% occurring in FY15, the first full fiscal year of casino gaming operations. This is less than the average observed decline of 6%. Then, a rebound of 8.3% is projected in FY16 followed by further growth in FY17 and FY18 with revenues projecting to neutralize at approximately \$5.5.

**Lottery Revenue  
Projections With Casino  
Impact**

Year	Revenue (\$M)
FY09	\$4,425
FY10	\$4,554
FY11	\$4,685
FY12	\$4,821
FY13	\$4,960
FY14	\$5,031
FY15	\$4,779
FY16	\$5,176
FY17	\$5,487
FY18	\$5,516

Source: La Fleur's, The Innovation Group

**Scenario C - Impact Based on States Showing a Decline, Eastern Casinos Only**

Whereas Scenario B is based on the full impact of casinos being located in the western and eastern portions of the state, Scenario C examines revenue figures for a potential lottery decline based on casino gaming only being established in the eastern portion of the state (corresponding to Scenario 1 in the Gaming Revenue Estimate section of our overall study).

The basis of this analysis was an examination of how casinos effect the immediately surrounding population in terms of lottery sales. What we have found through our research in states such as Pennsylvania and New York is that lottery sales within a close proximity to a casino decline as a result of its presence. Thus, in order to forecast this scenario, we first calculated the population that would now be unaffected by the presence of an easily accessible casino in the west. We estimated this population to be approximately 9% of the state's population. This percentage was then applied to the FY2015 incremental revenue impact between Scenario A (no casino impact) and Scenario B (full casino impact) resulting in estimated impact for a western casino of \$42 million. This value was then added back to FY2015 estimated revenue of \$4.78 billion as

projected in Scenario B yielding a revised revenue estimate of \$4.82 billion to reflect the impact of removing the western casino from the equation. As a result, the year over year decline from FY2014 to FY2015 was to 4.2% in Scenario C compared to 5.0% in Scenario B. Growth for FY2016-FY2018 period followed the same pattern of recovery as in Scenario B.

**Lottery Revenue Projections  
With Limited Casino Impact**

Year	Revenue (\$M)
FY09	\$4,425
FY10	\$4,554
FY11	\$4,685
FY12	\$4,821
FY13	\$4,960
FY14	\$5,031
FY15	\$4,821
FY16	\$5,222
FY17	\$5,535
FY18	\$5,564

Source: Le Fleur's, The Innovation Group

**Scenario D - Impact Based on States Showing a Decline, Eastern and Western Casinos and Track Facilities**

Scenario D calculates the impact of casinos in three regions around the state as well as at existing and former track facilities (corresponding to Scenario 4 in the Gaming Revenue Estimate section of our overall study).

The methodology used to calculate the additional impact of slot machines located at horse and former dog racing facilities also begins with our base impact calculated in Scenario B, adjusted in this case to reflect additional declines in lottery sales as a result of the horse and former dog track facilities. Our approach to calculating this incremental decline follows the approach used in Scenario C above, but instead of supplementing the base number, here it is discounted when the impact of horse and former dog tracks is included. The population immediately surrounding the horse and former dog tracks equals approximately 6.3% of the state population. Thus, the incremental decline in lottery sales could be looked at as roughly a 6.3% discount to the incremental difference between Scenarios A and B in FY2015. However, among this portion of the population there would already be reasonable access to casinos given the base distribution pattern under Scenario B. Therefore, we have discounted the impact from 6.3%, by 1.0%, to 5.3%. Applying the adjusted 5.3% discount to the difference between Scenarios A and B yields a revised discount of \$25 million, which was then subtracted from the \$4.78 billion as projected in Scenario B, yielding \$4.75 billion in Scenario C. As a result, the year over year decline from FY2014 to FY2015 increased to 5.5% versus 5.0% in Scenario B. Growth for FY2016-FY2018 period followed the same pattern of recovery as in Scenario B.

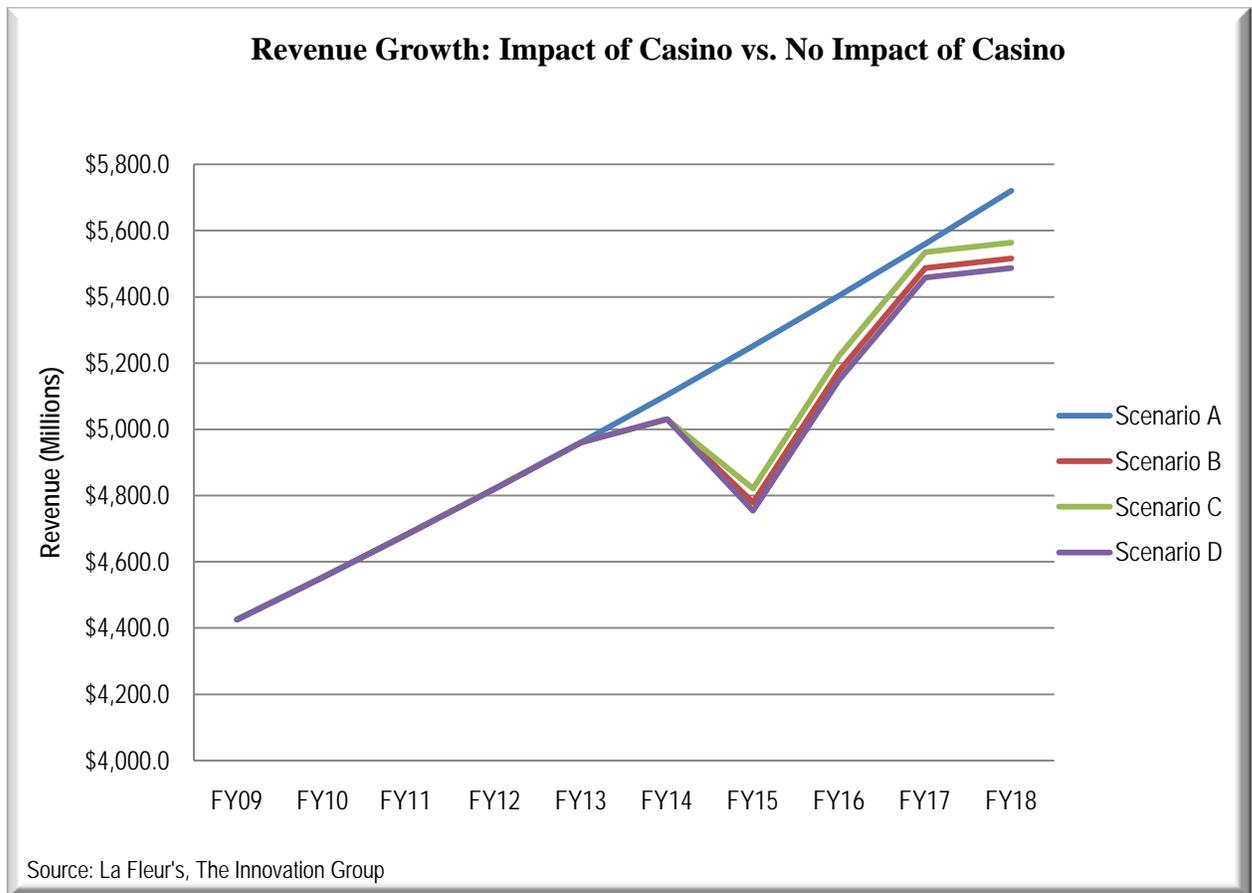
**Lottery Revenue  
Projections With Track  
Impact**

Year	Revenue (\$M)
FY09	\$4,425
FY10	\$4,554
FY11	\$4,685
FY12	\$4,821
FY13	\$4,960
FY14	\$5,031
FY15	\$4,754
FY16	\$5,149
FY17	\$5,458
FY18	\$5,487

Source: Le Fleur's, The Innovation Group

**Comparison between Projections**

The graph below highlights visually the difference the four above scenarios. The chart demonstrates the dip and recovery seen in Scenarios B, C and D, as compared to the continued growth pattern seen in Scenario A. Notably, revenues are lower in FY18 than they are for the straight line trajectory. We believe that this more accurately reflects larger more mature lottery markets and that given a longer time line; revenue growth will shift to resume more historical growth.



## Conclusions

Through the examination of lotteries, the effects of casinos, and growth rates in various situations, it is clear that year over year growth fluctuates highly in lotteries. In short, what our research indicates is that where lotteries are negatively affected by the introduction of casinos into a market, the duration of such effects is limited. States showing a decline the second year after a casino was opened, coinciding with the casino's first full year of operation, were reversed one to two years later.

Due to the volatility of lottery growth and differential impacts, we projected four scenarios to take into account the different impacts casinos may have on the lottery in Massachusetts: (A) No impact of casinos on lottery growth rates; (B) impact with casinos being introduced in the three defined regions in the state (correlating to Scenarios 2 and 3); (C) impact should casinos only be introduced in the eastern portion of the state (correlating to Scenario 1); and (D) impact should horse and former dog racing facilities be granted slot machines (correlating to Scenario 4).

The chart below displays revenue and year over year growth for the four scenarios beginning in FY2013, one year prior to the assumed opening of the casinos and thus, their impact on growth rates.

### Revenue For All Scenarios (\$M)

Scenario	FY13	Growth	FY14	Growth	FY15	Growth	FY16	Growth	FY17	Growth	FY18	Growth
Scenario A	\$4,960	2.9%	\$5,104	2.9%	\$5,252	2.9%	\$5,404	2.9%	\$5,560	2.9%	\$5,721	2.9%
Scenario B	\$4,960	2.9%	\$5,031	1.4%	\$4,779	-5.0%	\$5,176	8.3%	\$5,487	6.0%	\$5,516	0.5%
Scenario C	\$4,960	2.9%	\$5,031	1.4%	\$4,821	-4.2%	\$5,222	8.3%	\$5,535	6.0%	\$5,564	0.5%
Scenario D	\$4,960	2.9%	\$5,031	1.4%	\$4,754	-5.5%	\$5,149	8.3%	\$5,458	6.0%	\$5,487	0.5%

Source: The Innovation Group

The first scenario, Scenario A, demonstrated that lottery revenues continue to expand based on the historic average annual growth rate for the past decade. Using this metric, lottery revenues are projected to reach \$5.72 billion by FY2018.

Scenario B represents what is believed to be the impact of casino gaming if casinos are introduced statewide. This scenario takes into account the existence of casinos in both the eastern and western areas of the state. Deviation from the revenue projection in Scenario A is seen in FY2014, the first year that the casino is operational. Projected figures under scenario demonstrate a decline in revenue from approximately \$5.03 billion in FY2014 to \$4.78 billion in FY2015. Revenue figures rebound to \$5.18 billion in FY2016 and continue to grow to reach approximately \$5.52 billion in FY2018.

Scenario C examines the impact of casinos on lottery revenue under the assumption that a casino is not built in the western portion of the state. Under this scenario, in the first year of casino operations, FY2014, lottery revenue is estimated to be approximately \$5.03 billion, still consistent with Scenario B. By FY2015 revenue is forecasted to be \$4.82 billion, reflecting a 4.2% discount (compared to a 5.0% discount in Scenario B). Ultimately under this scenario, revenues reach \$5.56 billion in FY2018.

Estimates for Scenario D assumed that casinos were developed in each of the regions in the state as well as at existing and former track locations. In the first year of casino and track operations, FY2014, revenue for the lottery is expected to reach approximately \$5.03 billion, still consistent with Scenario B. By FY2015 revenue is forecasted to be \$4.75 billion, reflecting a 5.5% discount (compared to a 5.0% discount in Scenario B). Ultimately under this scenario, revenues reach \$5.49 billion in FY2018.

Despite wide array of possible impacts on the lottery, our research suggests that the Massachusetts Lottery is well poised to experience more limited impact than has been seen in other jurisdictions. This is a result of the Massachusetts lottery being a high volume and established lottery with muted impacts with the addition of gaming.

## CONCLUSIONS AND APPLICATION OF FINDINGS TO THE CASE OF MASSACHUSETTS

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The primary objective of the proposed introduction of casino gaming in Massachusetts is to enhance economic development and create jobs. The Commonwealth however, is not just focused on the short-term but wants to ensure that policies are in place and decisions are made that will allow the industry to thrive and be competitive and sustainable for many years to come.

It must be recognized that future casino developers and operators in Massachusetts, despite the perception that they will enjoy an Oligopoly given the likely limit in the number of licenses, will face significant competitive pressures. Gaming is well established in Connecticut and Rhode Island, as well as in Atlantic City, New York and Pennsylvania which all constrain the potential feeder markets in the northeast. In addition, these markets have had the advantage of cultivating gamer loyalty over the past several decades. Based upon the assumed competitive landscaped, further competition is likely to come from enhanced offerings in Rhode Island (table games) as well as additional gaming locations in Maine and perhaps New Hampshire. Thus, it is imperative that Massachusetts focus on establishing policies which maximize the potential competitiveness of the gaming industry.

In order to maximize the economic impact in Massachusetts, the Commonwealth needs to ensure that the industry is viable and sustainable for the long term and provide an overall experience that is competitive. Also, a system must be in place to ensure capital investment in attractive and competitive facilities. To accomplish this proposed new projects and expansion projects must achieve a certain level of profitability.

This report highlights how a healthy gaming industry will in fact lead to a number of simultaneous benefits. The fiscal benefits include tax revenue for the governmental entities and programs, and economic expansion. Economic expansion leads to more jobs and increased spending on goods and services in the state. Economic expansion is a direct result of the capital investment associated with the gaming facilities. In setting gaming industry policy, gaming regulators should be mindful of the trade-offs between long-term benefits associated with a healthy industry and the temporary impacts of increased gaming taxes generated by a higher effective tax rate.

In light of this situation, maximizing capital investment and thus the quality of the gaming product is especially important for Massachusetts, given the Commonwealth's goal of developing a sustainable and competitive industry. The Commonwealth will benefit from attracting well-capitalized companies with strong operating and development track records. In order to attract such entities, establishing the right policies will be critical. Policies which are most likely to drive the intended results are as follows:

## *Maximize the Potential to Create an Attractive, Regional and Nationally Competitive Industry*

- The jurisdictions with the lowest effective tax rates often feature the most elaborate casino developments, such as in Las Vegas, Atlantic City, Mississippi, and the Bahamas. The profit margins enabled by lower tax structures allow for the attraction of significant initial capital investment and subsequent reinvestment. In our modeling process we have utilized a flat 27% tax rate on gaming revenues for the Destination Resorts. This rate and structure represents the tax rate and structure included in the latest House bill and was utilized as an assumption in order to create a baseline case. However, it should be noted that on top of the 27% gaming tax in that specific proposal are other fees and costs which ultimately leads to what becomes an “effective tax rate” of 32%. In other words, additional levies of 2.5% of gaming revenues to fund programs for social costs associated with gaming and an additional 2.5% of gaming revenues to fund community mitigation costs must be paid by operators and therefore to them and the financing community are additional “taxes”. We believe that this tax structure of 27%, along with the additional 5% of other levies, approximates the upper limit of what the effective tax rate can be in Massachusetts and still meet the goals and objectives of the Commonwealth. In fact, in order to induce the maximum level of investment possible given market potential and the current state of the capital markets, we would suggest that consideration be given to lowering the gaming tax structure on the Destination Resorts to 25%, from 27%, especially in consideration of the Up-Front fee discussion noted below. This reduction would bring the effective tax rate to 30%, (25% gaming tax plus the 5% of other levies). The rationale behind the suggested reduction is that the Up-Front license fees, as noted in this report, are in effect an additional form of taxation. Hence, the upfront fees have the effect of raising the effective tax rate by an additional 2%-3%, thereby bringing the overall effective tax rate back up to the maximum 32%-33%% range, at least during the period that the fees were being amortized over. A graduated tax structure was considered from the perspective of viewing the Western Massachusetts market relative to the other two regions. While a facility in that market has been forecasted to have lower gaming revenues of approximately 25%-30% compared to the other two regions, the revenue potential is still significant, the competitive marketplace is attractive, and the overall discrepancy in revenue potential is not significant enough to warrant a graduated tax structure.
- The up-front license fees should be set at \$75 million for the two regions closest to Boston and \$50 million for Western Massachusetts. The chart below summarizes the impact that various levels of license fees would have on the effective tax rates given various levels of revenues. In essence, for a facility deriving \$500 million in revenues, a \$75 million fee raises the effective tax rate by approximately 2.9%, and for a facility in Western Massachusetts achieving \$400 million in revenues, a fee of \$50 million would have approximately the

same effect and would therefore be more appropriate.

**Impact on Effective Tax Rate of License Fees<sup>1</sup>**

Revenue (\$M)	License Fees (\$M)			
	\$25.0	\$35.0	\$50.0	\$75.0
\$350.0	1.4%	1.9%	2.8%	4.2%
\$400.0	1.2%	1.7%	2.4%	3.6%
\$450.0	1.1%	1.5%	2.2%	3.2%
\$500.0	1.0%	1.4%	1.9%	2.9%

Source: The Innovation Group

1) Assumes 8-year term at 11.0%

- Limit the number of major casinos to one “Destination Resort” per region in order to reduce competitive risk, encourage investment and ultimately allow the developers to the ability obtain the amount of financing needed under rates and terms and conditions that permit them to build competitive facilities and have the operating flexibility needed to remain competitive. The addition of a potential fourth Destination Resort in the form of a Native American facility at some point in time has a potential significant negative effect (up to %75 million or 15%) on the forecasted revenues of the three Destination Resort facilities. This reduction in revenue will affect both EBITDA and the level of investment in Destination Resorts. First, the revenue loss will have a disproportionately high impact on EBITDA as these higher level of total revenues represent higher marginal profits for the properties. In other words, the properties have covered fixed and semi-variable costs with the majority of the revenue estimates. The remaining incremental revenues, or in this case those revenues expected to be lost to the new property, generally only have variable costs associated with them and therefore account for a significant component of the overall profitability.. Thus, the EBITDA loss on \$75 million in revenue could equate to as much as \$40-45 million in reduced EBITDA. Consequently, investors will be likely have to reduce the overall level of investment in a Destination Resort, in our estimation by as much as nearly \$200 million (assuming leverage at 4.0x EBITDA), meaningfully decreasing the scale and attractiveness of the resort. In addition, the overall uncertainty created by the potential entrance of a Native American facility at some point in time, would likely contribute to the market risks for developers and further impair the ability of developers to attract the capital needed to build larger and more competitive facilities.
- The introduction of a limited number of slots at existing and former race facilities (750 at each of four locations) could ultimately grow the overall market revenues and increase the number of jobs created. However, while under the 750 machine scenario, the impact on the Destination Resort revenue estimates are not as severe as in Scenario 4B (1,500 machines per location), the presence of slots at existing and former race facilities alone would likely create material uncertainty and additional risk to potential developers seeking capital. This in turn would impact the overall scope and size of potential development projects. Developers are

likely to be hesitant to commit capital to the level they would without the presence of slots at existing and former race facilities or may prefer to move forward on a phasing approach to developments. Further concerns about the tracks adding more slots in the future, which would create further dilution, (and as demonstrated in Scenario 4B) could provide enough market uncertainty that the long term goals of the Commonwealth for the industry in Massachusetts are impacted. It is likely that, under this set of competitive circumstances, an investment that does not reflect the full market potential in the region will lead to a product statewide that will not effectively compete against facilities in nearby states, specifically the resorts located in Connecticut. If the Commonwealth were to move forward under a scenario whereby tracks receive a limited number of licenses, despite the risks noted above, consideration should be given to providing developers of the proposed Destination Resorts (and consequently their financing sources), with the commitment that that the number of slot at the racetracks would not be increased meaningfully during the initial license period for the Destination Resorts.

- The significant potential negative implications of implementing a scenario whereby the existing and former racetracks are granted permission to have up to 1,500 slot machines is likely to reduce the forecasted revenue levels for the Destination Resorts significantly, while also creating a level of uncertainty and risk such that development of competitive Destination Resorts would likely be curtailed.
- Destination Resorts are the best tool to reach the stated goals of creating a healthy, sustainable source of revenue for the Commonwealth and an active source of investment, reinvestment, and jobs. If the Commonwealth were to move forward with one destination resort in each of the three regions, the risk of a fourth entrant will need to be overcome by stakeholders, operators, and the Commonwealth due to the possibility that land in trust is granted to a Native American tribe. Within the industry, this has shown to be a significant risk as several jurisdictions have created uneven playing fields in which commercial enterprises are unable to compete with newly approved Native American facilities, leading to bankruptcies or extensive negotiations and legislative processes. Furthermore, the incremental risk associated with the potential of four competing facilities at existing and former racing facilities will further undermine the ability of casino resort applicants to put forth proposals and gain financing that will create a facility capable of competing with the highly competitive product located in nearby jurisdictions. In the current financing environment, and with several bankruptcies in the industry, this combined risk has a significant chance of leading to sub-optimal outcomes relative to the stated goals.
- Finally, under this situation where slots are allowed at racetracks, consideration needs to be given to the forecasted revenue numbers for the existing and former race facilities, the potential EBITDA levels that can be achieved (see EBITDA Estimates section) and the ultimate level of building or development that these

modest EBITDA levels can support. The modest revenue numbers forecasted would result in EBITDA levels that are likely to not support significant development or refurbishment costs for several of the tracks.

- We believe that requiring a minimum investment in terms of up-front dollar commitment would not be advantageous. Similarly, we have concluded that a well-run RFP process, assuming a reasonable tax rate and other considerations will encourage more potential teams consisting of strong, experienced developers, operators and equity partners. Market demand and the capital markets can determine how much should be invested, although consideration should be given to ensuring that projects are not overleveraged from the beginning by actually limiting the amount of leverage allowed. The addition of the proposed up-front fees noted above and the market imposed limitations on debt leverage and equity return demands will also dictate the parameters for the developments. As noted throughout our study, the capital markets and investor return criteria will determine the level of development that can be supported based upon expected levels of revenues and EBITDA.
- To the extent possible, limit direct restrictions on the casino operating environment including any restrictions that would limit revenue potential and/or increase costs. In other words, allow table games and 24-hour gambling, provide promotional allowances and allow drinks on the casino floor, extension of credit and other customary operating policies. As in some other jurisdictions we also suggest that Free Play incentives provided to customers be deducted from Gross Win calculations before gaming taxes are applied.
- Smoking policies must be competitive with nearby regional competition. For example, in our analysis, we generally assumed that a minimum portion of the casino gaming floors (i.e. 25%) would allow smoking, although smoking would not be allowed in hotels or restaurants.
- Through the examination of lotteries, the effects of casinos, and growth rates in various situations, it is clear that year-over-year growth fluctuates highly in lotteries. In short, what our research indicates is that where lotteries are negatively affected by the introduction of casinos into a market, the duration of such effects is limited. States showing a decline the second year after a casino was opened, coinciding with the casino's first full year of operation, were reversed one to two years later. Despite the wide array of possible impacts on the lottery, our research suggests that the Massachusetts Lottery is well poised to experience more limited impact than has been seen in other jurisdictions.

### *Maximize Stability in Tax and Regulatory Environment*

- In order to create the stable market environment that will best induce the development of a healthy industry and long-term tourism benefits, offer a

guaranteed period during which taxes would remain constant or within a set range.

- In order to create both the reality and appearance of a transparent and legitimate industry to global gaming investors, operators, and patrons alike, it is imperative to create a strong regulatory and oversight mechanism (such as a properly empowered Gaming Control Board) which can enforce the operating guidelines established for the industry. Such an authority will ensure confidence among investors and fairness to gaming patrons. Furthermore, the authority will guarantee that there is no tint of corruption or criminal involvement within the jurisdiction.

### *Maintain a Healthy Gaming Industry*

- In our opinion, additional fees or levies should be implemented to be used directly to offset community costs and potential negative social impacts associated with the development of gaming. In the House proposal cited, 2.5% of annual gaming revenues are proposed to be set aside for a Public Health Trust Fund to fund programs to deal with potential problem gambling and other potential health and human services issues. Given the level of forecasted gaming revenues, this level of funding would put the State of Massachusetts in the top tier of funding for these types of programs and probably is more than adequate to cover such programs. Setting aside funding in this case 2.5% of gaming revenues to fund Community Mitigation Costs is also good public policy and will go far in dealing with the real costs that local municipalities will likely face. Without knowing the exact locations of where the casino facilities might go, or the extent of the developments and other factors, it is difficult to evaluate whether this formula is adequate or not.
- Consider a requirement that 3.5% - 4.0% of annual gaming revenues be set aside for ongoing capital expenditures to ensure that the properties remain competitive, even during possible economic swings. Given the Up-Front fees that are recommended and the fact that the facilities will be new developments, we suggest that this requiring be implemented commencing with the third year of operations.
- Develop a licensing process that is strict yet efficient by working with other jurisdictions, copying their approaches and having reciprocal arrangements to share data, especially for applicants who have received or been denied licenses in other jurisdictions. Ensure that there is adequately trained staff to allow for reasonable turnaround in license applications.

## DISCLAIMER

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

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

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