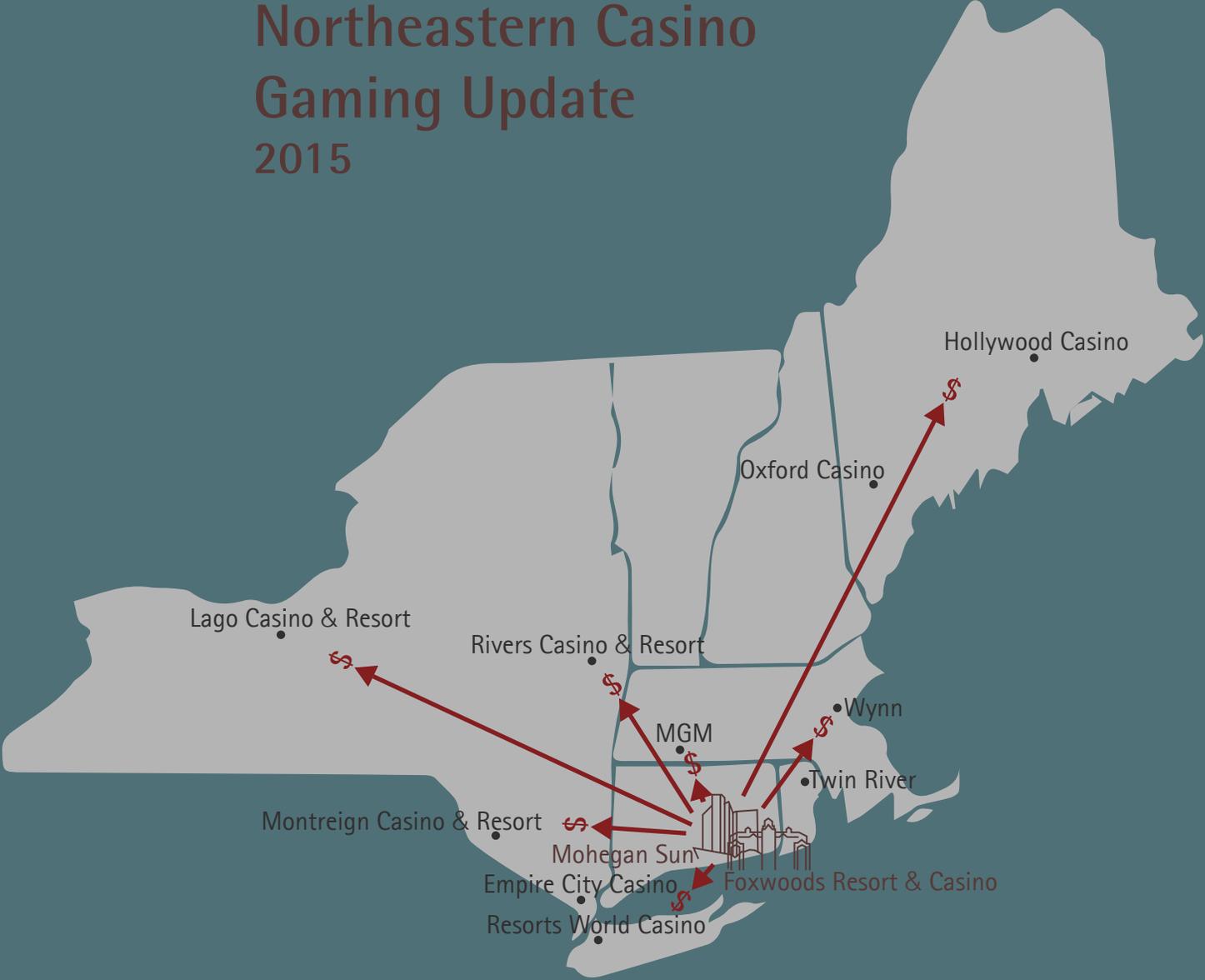


Northeastern Casino Gaming Update 2015



Prepared by:



PYRAMID ASSOCIATES, LLC

NORTHEASTERN CASINO GAMING UPDATE, 2015



Pyramid Associates, LLC is a registered Massachusetts company (est. 2006) with offices in Westport, Massachusetts and Edinburg, Texas. The company specializes in providing custom designed applied policy and economic research for clients in the public, private, and non-profit sectors, including many Fortune 500 companies. The company's areas of expertise include:

- Gaming market analysis (gravity modeling),
- Economic impact and economic base analysis,
- Industry analysis,
- Workforce development planning, and
- Public opinion polling and behavioral survey research.

The partners and employees at Pyramid Associates, LLC have conducted research on a wide variety of industries, including:

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- Cultural economic development,
- Arts and crafts,
- Retail trade,
- Health care,
- Marine science and technology,
- Technology assessment,
- Textiles and apparel,
- Needs Assessment,
- Educational services, and
- Workforce development planning.

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NORTHEASTERN CASINO GAMING UPDATE 2015

OVERVIEW & EXECUTIVE SUMMARY

The Northeastern Gaming Research Project has updated its New England casino patron origin and fiscal impact analysis for calendar year 2014.¹ The update includes new patron origin and financial data for Foxwoods Resort Casino and Mohegan Sun Casino in Connecticut; Twin River and Newport Grand Slots in Rhode Island; and Hollywood Casino Hotel & Raceway and Oxford Casino in Maine. The report also provides an overview of trends in the Northeastern casino gaming industry, which continues to influence gaming policy and patron behavior in the six New England states.

Overview of the Northeastern Gaming Market 2015

The Project continues to note that the New England casino gaming market is developing and changing as a result of two recent developments: (1) the lingering impact of the Great Recession (December 2007-June 2009), which continues to depress discretionary spending on casino gaming and (2) the emergence of an increasingly competitive Northeastern gaming market that encompasses both the New England² and the Mid-Atlantic³ states. As the national and regional economy continues its slow recovery, state casino gaming policy and individual gaming operator are shifting their attention to questions of regional competition, market saturation, and inter-state cannibalization.

Events in New Jersey have been the catalyst for these concerns as the steady expansion of casino gambling in Atlantic City from 1978 to 2006 made it the United States' second largest commercial gambling venue behind Las Vegas.⁴ Atlantic City reached its peak as a gambling capital in 2006, when it hosted 12 casinos that generated \$5.2 billion in gross gaming revenue (GGR).⁵

However, by mid-September of 2014, one-third of Atlantic City's 12 casinos had shuttered their doors,⁶ including the \$2.4 billion Revel, which was hailed by many public officials and gaming industry leaders as the beginning of a rebirth for Atlantic City's faltering fortunes (Kramer 2014).⁷ The casino closures are a direct result of declining gross gaming revenue, which fell from \$5.2 billion in FY 2006 to \$2.7 billion (-48.1%) in FY 2014. The gaming revenue declines and consequent casino closures have resulted in 9,000 lost casino and hospitality jobs (Hoa 2014).

Not surprisingly, media accounts now regularly refer to Atlantic City as the East Coast's "faded gambling mecca"

¹ The Northeastern Gaming Research Project was established in 2004 to provide policymakers, the general public, and the media with independent and objective research on the economic, fiscal, and social impacts of gaming in the New England and Mid-Atlantic regions.

² Connecticut, Maine, Massachusetts, Rhode Island, New Hampshire, and Vermont.

³ Delaware, Maryland, New Jersey, New York, Pennsylvania, and West Virginia. Ohio is also included as part of the northeastern casino gaming market, because its casinos compete directly with casinos in West Virginia, western Pennsylvania, and western New York as opposed to competing with casinos in the Midwest casino gaming market (i.e., Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, and Wisconsin).

⁴ In 2012, Pennsylvania surpassed New Jersey to become the nation's second largest commercial gambling jurisdiction based on gross gaming revenues.

⁵ Atlantic City Hilton (renamed the Atlantic Club), Bally's Park Place, Borgata, Caesar's Atlantic City, Harrah's Atlantic City, Resorts, Sands (later demolished), Showboat, Tropicana, Trump Marina (renamed Golden Nugget), Trump Plaza, and Trump Taj Mahal, New Jersey Casino Control Commission, "Financial and Statistical Information," Available at <http://www.nj.gov/oag/ge/financialandstatisticalinfo.html>

⁶ Atlantic Club, Revel, Showboat, and Trump Plaza.

⁷ One media account of the Revel's closing states that "Revel, once thought to be the Boardwalk's best and brightest, became perhaps its greatest failure," see Kramer (2014).

(Hurdle 2014). In fact, the resulting newspaper headlines read like an obituary page for the Northeastern casino gaming industry:⁸

- “Death of Atlantic City Casinos” (Hoa 2014),
- “Showboat Casino Closes Amid Tears and Questions About Atlantic City’s Direction (*New York Times*, 8-31-2014),
- “N.J. Casino Woes” (*Boston Globe*, 9-1-2014),
- “Casino Gambling: Any Hope Has Faded” (*Foster’s Daily Democrat*, 8-19-2014),
- “Casinos: Nothing But Trouble” (*Manchester Union-Leader*, 8-11-2014),
- “Death of Atlantic City Casinos Could Be Omen for N.Y.” (*Lower Hudson Valley Journal News*, 8-29-2014),
- “U.S. Casino Industry in the Midst of Collapse” (*Portsmouth Herald*, 7-29-2014),
- “America’s Casino Saturation Problem” (Wolfson 2014).

The dour news on casinos in the Northeastern media has not been confined to New Jersey as the same contagion has spread to Connecticut’s two behemoth Indian casinos – Foxwoods Resort Casino and Mohegan Sun Casino. At their 2006 peak, Connecticut’s Indian casinos were the two largest resort casinos in the world based on the number of gaming positions, gross gaming revenue, and total revenue (Barrow and Borges 2007).⁹ However, New England media outlets now rightly report that there is “More Financial Trouble at Foxwoods” (Kostrzewa 2014). The Mashantucket Pequot Tribe, which owns Foxwoods Resort Casino, reports that a sluggish economic recovery and increasing competition in the Northeast is the explanation for Foxwoods’ “failure to comply with certain financial covenants” in its credit facility (Journal Wire Services 2014).

Foxwoods’s announcement came only one year after the Tribe had defaulted on a debt of \$2.3 billion and subsequently reached an agreement with lenders to exchange it for \$1.7 billion in new debt. However, the agreement reached in July of 2013 was based on a financial performance forecast that assumed “improved economic conditions and a leveling out of competitive factors” (Ibid.). In contrast, gross gaming revenue has continued falling on a year-to-year basis since 2007, while the competition for gamblers in New England will actually increase as Massachusetts adds two (and maybe three) destination resort casinos and a slot parlor and as New York builds three resort casinos.

Consequently, many gaming industry analysts predict that what happened to Atlantic City will also happen to Foxwoods and Mohegan Sun once Massachusetts and New York open new resort casinos. For example, casino consultant Gary Green has suggested that Foxwoods Resorts Casino and Mohegan Sun Casino will be “completely cannibalized” by new casinos in Massachusetts (quoted in Arsenault 2014) and this claim is supported by the patron origin data collected by the Northeastern Gaming Research Project.¹⁰

At the same time, the troubles in Connecticut and New Jersey have led some industry observers to suggest that the “Bay State May Not Hit Promised Jackpot with Casinos” (Cassidy 2014), while elsewhere “N.Y. Casino Bidders Quizzed on Revenue in Saturated Market” (Klopott 2014). Donald Trump, the former owner of three Atlantic City casinos¹¹ has predicted that the “NY casino projects will all go down the tubes” (2014).

The media focus on Atlantic City and Foxwoods Resort has ignited a debate about the future of the Northeastern casino gaming industry with critics claiming that planned expansions in Massachusetts and New York are doomed

⁸ The Northeastern Gaming Research Project defines the Northeastern gaming market as casinos located in New England (i.e., Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island), the Mid-Atlantic (i.e., Maryland, Delaware, West Virginia, New Jersey, Pennsylvania, and New York), and Ohio (which competes for customers with Pennsylvania, West Virginia, and New York).

⁹ In CY 2006, it is estimated that Foxwoods Resort Casino and Mohegan Sun Casino each generated approximately \$1.6 billion in total (gaming and non-gaming) revenue, see Barrow and Borges (2007).

¹⁰ In CY 2012, Foxwoods drew 32% of its patrons from Massachusetts and 10% of its patrons from New York, while Mohegan Sun drew 19% of its patrons from Massachusetts and 13% of its patrons from New York, see Barrow and Borges (2013a, 23-24).

¹¹ Trump Marina, Trump Plaza, and Trump Taj Mahal.

to fail (Arsenault 2014), and the on-going debates about gaming expansion in New Hampshire and Maine have skeptics pointing to Atlantic City to bolster claims about oversaturation and a declining regional industry. These critics describe Atlantic City as a harbinger of things to come throughout the Northeast as new supply generates ever stiffer competition in the gaming market.

Moreover, increased competition in the casino gaming industry comes at a time when many state economies remain sluggish with slow employment and income growth, while others argue that the casino gaming is a saturated market with no room for new growth.¹² Matt Dalton, the head of Belle Haven Investments in White Plains, New York has stated that the main challenge for the Northeastern gaming industry is “dealing with competition. The casinos that are going to be built now, they’re not all going to survive.”¹³ As reported in the *Boston Globe* (09-01-2014), casino opponents “have seized upon Atlantic City’s troubles as a campaign issue, arguing the Northeast cannot support the abundance of casinos that already exist, so why build more?” (Arsenault 2014; Klopott 2014).

However, other investors, gaming analysts, and public officials believe there is more room for expansion in the Northeast depending on the number, location and type of new gaming facilities. For example, New York, Massachusetts, Philadelphia, southern New Hampshire, and Maine have been identified as planned or potential areas for new gaming expansion, partly on the premise that by offering attractive gaming facilities closer to major population centers (e.g., Albany, Boston, New York City, Philadelphia, Portland) local and regional gamblers who currently visit casinos in Connecticut and New Jersey can be induced to stay closer to home (Arsenault 2014). Many of the visits to these planned or proposed gaming facilities will come at the expense of legacy states, especially Connecticut and New Jersey, which entered the market early and enjoyed the rent-seeking benefits of a regional monopoly for more than three decades. However, even gaming expansion proponents argue that new facilities will need to offer a mix of convenience, state-of-the art slot machines, table games, and other entertainment and non-gaming amenities (e.g., golf courses, retail shopping, water parks, concert arenas, and dance clubs) to out-compete the existing facilities in these markets (MPBN News 2014, Hurdle 2014).

From this perspective, the events in New Jersey and Connecticut are merely a normal market shakeout that is typical of a maturing and competitive industry (Hurdle 2014).¹⁴ For example, Israel Posner, an expert on Atlantic City and director of the Levenson Institute of Gaming, Hospitality, and Tourism at Richard Stockton College of New Jersey, observes that after a decade of gaming expansion in the Mid-Atlantic region, Atlantic City now “has roughly 45 percent of the region’s casinos, and gets roughly 45 percent of the revenue” (quoted in Arsenault 2014), which signals nothing more than the restoration of equilibrium in an expanding, but competitive market.¹⁵ In this vein, Robert Shore of Union Gaming Group has suggested that Atlantic City’s woes actually “reflect the success of other areas like Maryland and Pennsylvania” (Cassidy 2014).

¹² Roger Gros, publisher of Global Gaming Business Magazine, quoted in Hoa (2014).

¹³ Quoted in Hoa (2014).

¹⁴ One might compare the casino industry to the retail trade, airline, and automobile industries as comparative case studies. While individual companies have failed to survive national and global shakeouts, the end result is a modernized, innovative, and healthier industry. For example, while the Detroit automobile industry and other rust belt cities have witnessed calamitous declines in production and employment, the industry has not so much declined as shifted its production to southern states that have induced these businesses to move away from historical or legacy manufacturing centers in the Midwest and Northeast.

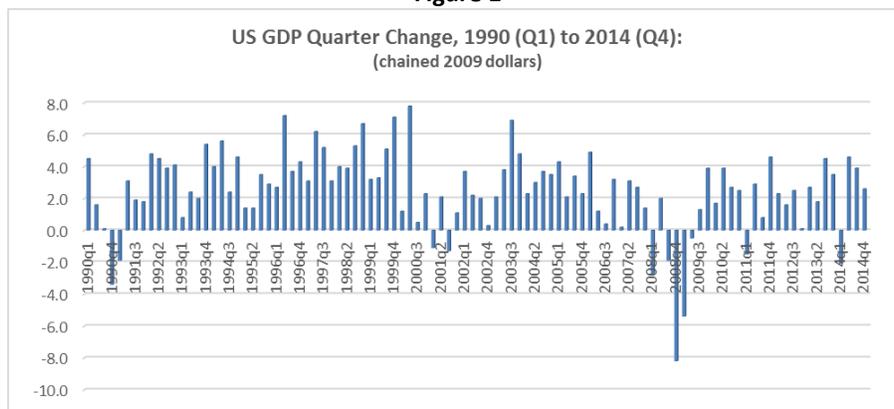
¹⁵ Posner is using a form of “fair share analysis,” which is a widely accepted method for comparing a casino’s performance to its competitors in a local or regional market. Fair share analysis compares the gross gaming revenues (GGR) a casino should capture in a local or regional market based on its percentage of the total gaming positions in that market. If a casino has 25% of the total gaming positions in a market then its “fair share” of GGR is 25% of the total GGR generated in that market. If it actually captures 25% of total GGR then it has captured 100% of its fair share. Posner is arguing that Atlantic City is capturing its fair share of the Mid-Atlantic gaming market based on its current configuration and the additional of new supply. Thus, officials at Caesars Entertainment, Inc., which owns 3 of the remaining 8 casinos in Atlantic City have stated their belief that “a reduction in supply [in Atlantic City] will buoy the three other casinos” that it still owns in that market, see Kramer (2014), and these forecasts have proven accurate.

Casino Industry No Longer Recession Proof, But Hardly Collapsing

Casino gaming is classified as part of the U.S. economy’s arts, amusement, and recreation sector (NAICS Code 71) and as part of its hospitality sector (NAICS Code 72 -- Accommodation and Food Services). Casino gaming in all its forms depends on discretionary consumer spending, which is one of the first types of spending that is restrained by consumers when they are uncertain about their jobs and income and it is also the last type of spending to be restored once an economic recovery is underway.

However, based largely on the previous experience of Las Vegas and Atlantic City, many analysts had viewed the casino industry as recession proof or at least as recession resistant. Until 2008, Las Vegas and Atlantic City had seen gambling revenues fall only once since 1970 -- in the aftermath of the September 11, 2001 terrorist attack on the World Trade Towers -- when gaming revenues dropped 1 percent in 2002 as compared to 2001 (Freiss 2008).

Figure 1



The United States economy essentially dropped off a cliff in calendar year 2008 to begin the longest and deepest recession since the Great Depression of the 1930s. The National Bureau of Economic Research (NBER) Business Cycle Dating Committee defines a recession as “a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in production, employment, real income, and other indicators. A recession begins when the economy reaches a peak of activity and ends when the economy reaches its trough.”¹⁶ The Business Cycle Dating Committee has determined that a peak in economic activity occurred in the United States in December 2007.¹⁷ The NBER recently determined that the Great Recession ended in June 2009. However, in making this determination, the NBER’s Business Cycle Dating Committee observed that “in determining that a trough occurred in June 2009, the committee did not conclude that economic conditions since that month have been favorable or that the economy has returned to operating at normal capacity. Rather, the committee determined only that the recession ended and a recovery began in that month.”¹⁸

Not coincidentally, in 2008, gross gaming revenue began declining on a year-to-year basis in most casino jurisdictions (see Figure 2), including Nevada and New Jersey, although some new jurisdictions such as Maine, Pennsylvania, New York, and Rhode Island, continued to see gaming revenues increase on a year-to-year basis during this time. Overall, however, gross gaming revenue at commercial casinos in the United States reached a peak (\$37.5 billion) in Calendar Year 2007 – the last peak in the U.S. business cycle -- and gross gaming revenue at

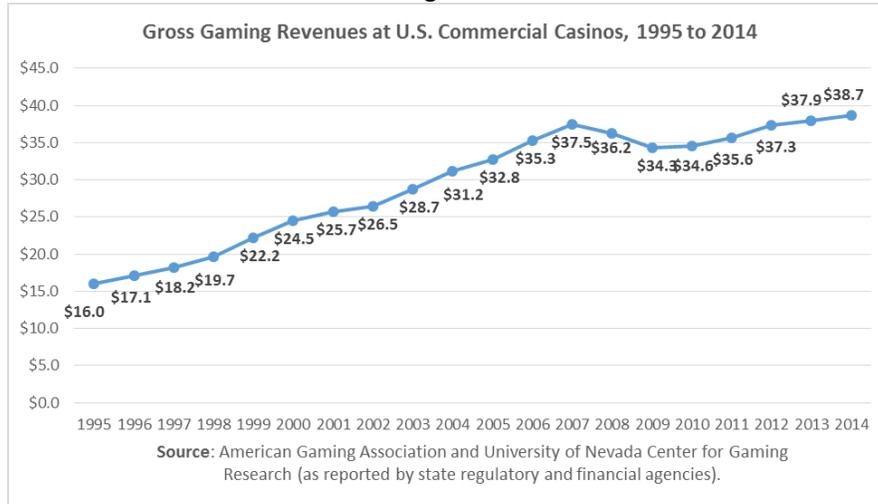
¹⁶ NBER Business Cycle Memo (December 11, 2008): “The committee believes that the two most reliable comprehensive estimates of aggregate domestic production are normally the quarterly estimate of real Gross Domestic Product and the quarterly estimate of real Gross Domestic Income, both produced by the Bureau of Economic Analysis. In concept, the two should be the same, because sales of products generate income for producers and workers equal to the value of the sales.”

¹⁷ NBER Business Cycle Memo (Nov. 28, 2008): “The [dating] committee determined that a peak in economic activity occurred in the U.S. economy in December 2007.”

¹⁸ NBER Business Cycle Memo (September 20, 2010) at <http://www.nber.org/cycles/sept2010.html>.

commercial casinos bottomed out at \$34.3 billion (-8.6%) in CY 2009, which includes the trough quarters in U.S. GDP as defined by the NBER's Business Cycle Dating Committee (e.g., compare Figure 1 and Figure 2). Since that time, gross gaming revenue at U.S. commercial casinos has recovered to \$38.7 billion (+12.8%) and has exceeded its previous CY 2007 peak in the last two calendar years.

Figure 2

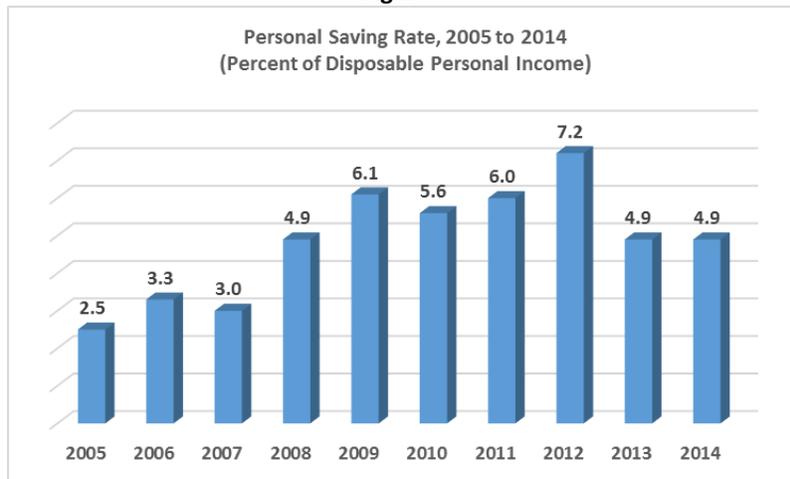


On the national level, gross gaming revenue at commercial casinos began a two-year 8.6% decline (2008-2009), which coincided with the worst years of the Great Recession, followed by a five-year 12.8% recovery in gross gaming revenue (2010-2014) (see Figure 2).¹⁹ This is not a pattern that defines a collapsing industry, but it does confirm that casino gaming is no longer recession proof.

In fact, overall spending on casino gaming closely tracked changes in the personal saving rate from recent peak levels of casino spending (2007) to the trough in casino spending (2009) through its recent recovery (2013-2014). As spending on casino gaming peaked nationally in 2005 to 2007, the personal saving rate averaged about 3.0% during these years. The personal saving rate more than doubled by 2009 – the trough in casino spending – and fell back to 4.9% in 2013 and 2014 as spending on casino gaming began to recover in those years (see Figure 3). Spending on casino gaming depends on discretionary (as opposed to disposable) personal income and, consequently, small changes in the saving rate of one percentage point or less are likely to have a significant impact on the casino gaming industry as it matures in the coming years. As Figure 3 illustrates, the Great Recession induced an immediate increase in the personal saving rate, but the uncertainty generated by that event (and therefore the inclination to save) lasted well beyond the official end of the Great Recession and its impact on saving vs. spending behavior has not yet completely abated.

¹⁹ A similar pattern characterizes the Indian casino industry, see Meister (2007-2014).

Figure 3



Quite simply, as casinos evolve into local and regional entertainment venues with an array of non-gaming amenities, and as gaming itself increasingly takes on the characteristics of a commodity, it will be subject to the same macro-economic factors as any other consumer retail or service industry.²⁰ Mitchell Etes, former president and chief executive officer of the Mohegan Tribal Gaming Authority, has observed that “not even casinos are immune from problems with the economy.”²¹ However, we should not confuse normal revenue related to the business cycle with a structural industry collapse. In contrast to the exaggerated headlines predicting a collapse of the casino gaming industry, it is more accurate to say that the industry is maturing as a result of growth and increased competition and, therefore, casino operators can no longer expect to capture the rents that accrue to oligopolies and monopolies.²²

The robust growth, and the increase in competition among individual gaming facilities is visually illustrated in Figure 4 and Figure 5. In 2004, there were 29 Class III gaming facilities in the Northeast with 12 (41%) of them located in Atlantic City. The only significant competition for Atlantic City casinos were Foxwoods Resort Casino and Mohegan Sun Casino in Connecticut -- roughly a 3 to 3 ½ drive from Atlantic City. There are now 64 Class III gaming establishments in the Northeast, which now constitute a \$17.0 billion industry (see Table 1).

²⁰ I have stated previously that “the level of competition will continue to escalate, because at this point, table games and slot machines are just like a commodity – like copper and aluminum,” quoted in Wittkowski (2013). This means that competitive advantage is shifting to the quality and diversity of offerings and even in Atlantic City non-gaming revenues have been increasing as gaming revenues fall, see, Kramer and Ianieri (2014).

²¹ Associated Press, “Mohegan Sun Delaying Expansion Plans,” see, <http://www.fox61.com/pages/landing/?Mohegan-Sun-delaying-expansion-plans=1&blockID=65412&feedID=341>

²² Monopolies are able to generate rents, which is defined as “excess income” received over the minimum amount necessary to justify an investment in the resource, operation, function, or activity, see Shim and Siegel (1995, 297). As an industry moves from monopoly to competition, profit levels will gravitate toward the minimum necessary to justify an investment in that operation as compared to some other alternative economic activity.

Figure 4

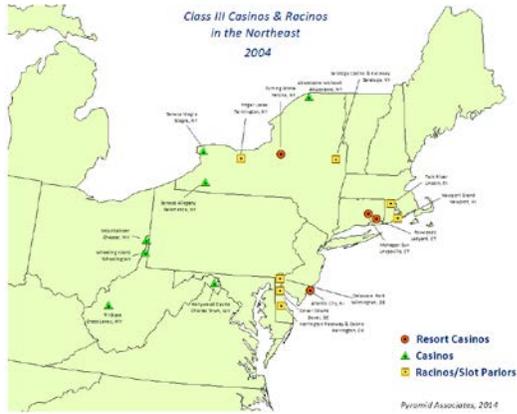


Figure 5
 Class III Casinos & Racinos
 in the Northeast
 2014

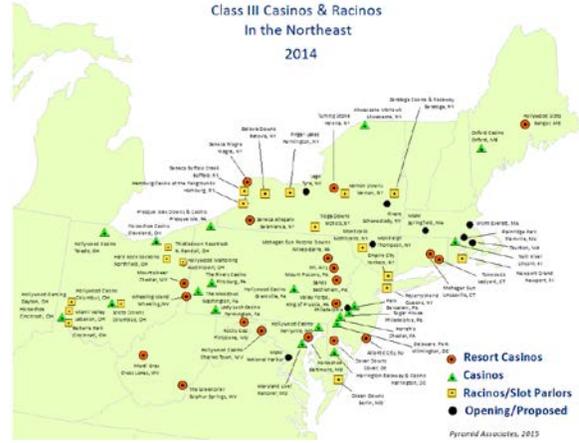


Table 1

| TOTAL CASINO EXPENDITURES IN THE NORTHEAST, CY 2014 | | | | | |
|---|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| | Slot Win | Other Gaming | Total Gaming | NonGaming | Gross Revenue |
| Connecticut | \$1,067,471,619 | \$468,455,744 | \$1,535,927,363 | \$387,084,414 | \$1,923,011,777 |
| Rhode Island | \$510,999,169 | \$98,928,174 | \$609,927,343 | \$57,333,170 | \$667,260,513 |
| Maine | \$104,778,626 | \$22,491,002 | \$127,269,628 | \$10,690,649 | \$137,960,277 |
| Delaware | \$352,146,100 | \$51,295,664 | \$403,441,764 | \$41,957,943 | \$445,399,707 |
| Maryland | \$628,794,028 | \$302,288,990 | \$931,083,018 | \$107,074,547 | \$1,038,157,565 |
| New Jersey | \$1,874,715,209 | \$708,217,702 | \$2,582,932,911 | \$896,277,720 | \$3,479,210,631 |
| New York (VLTS) | \$1,898,335,717 | \$0 | \$1,898,335,717 | \$144,273,514 | \$2,042,609,231 |
| New York (Indian) | N/A | N/A | \$1,056,600,000 | \$124,200,000 | \$1,180,800,000 |
| Ohio | \$1,148,068,043 | \$273,801,869 | \$1,421,869,912 | \$147,874,471 | \$1,569,744,383 |
| Pennsylvania | \$2,319,534,380 | \$749,507,225 | \$3,069,041,605 | \$288,489,911 | \$3,357,531,516 |
| West Virginia | \$947,000,314 | \$143,322,083 | \$1,090,322,397 | \$103,580,628 | \$1,193,903,025 |
| GRAND TOTAL | \$10,851,843,205 | \$2,818,308,453 | \$14,726,751,658 | \$2,308,836,968 | \$17,035,588,626 |

Sources: State gaming regulatory commissions; Meister, *Indian Gaming Industry Report, 2011-2014*; U.S. SEC 10-K Filings; Pyramid Associates, LLC (2015).

The regional industry supply will continue to grow as Pennsylvania builds an additional casino in Philadelphia; New York builds three resort casinos in upstate and western New York; Massachusetts opens at least two resort casinos and a slot parlor, and Maryland adds a casino in National Harbor. This means that by the end of calendar year 2017, it is entirely possible, if not likely, that there will be 75 Class III casinos in the Northeast, with many of the planned and proposed facilities located closer to major population and income centers, such as Baltimore, Boston, Philadelphia, New York City, and Washington, D.C.

Competitive Growth is the Future

The rapid and continuing expansion of gaming supply in the Northeast has made “market saturation” a salient point of public policy debate in many state legislatures and the media. In fact, the real debate should not be about saturation, but about the question of oversaturation. Market saturation is defined as “the point of a product life cycle where the market has been completely filled so that no more sales for goods and services can be taken up” by additional supply or by new producers (Shim and Seigel 1995, 306). In simple terms, saturation is the point where supply and demand are in equilibrium. In the gaming industry, *over*-saturation will become evident when new supply does not generate additional gross gaming revenue, but even under this still hypothetical scenario new suppliers will still try to enter the gaming market if they are willing (and able) to accept lower operating and profit margins. Whether the latter is beneficial to a particular state’s gaming and fiscal policy will depend on whether it is able to generate new demand in its local market and/or recapture revenue and jobs being lost to other states (McGowan 2009). Furthermore, even in a state of equilibrium, existing suppliers may still be displaced by new suppliers, who offer a more competitive and up-to-date gaming facility or who offer gaming in a more strategic location; namely, a specific location that is underserved in the broader market or that is located closer to a population center than competing gaming facilities.

It is also important to recognize that saturation is not a fixed point, because the level of supply necessary to meet demand can vary over the business cycle. It also varies with consumer confidence (or uncertainty) about current and future economic conditions (Barrow and Borges 2014). Furthermore, the quantitative equilibrium defining saturation can shift with consumer preferences (e.g., casinos vs. horse racing), and it can grow organically with increases population and/or disposable personal income. Thus, even if a market was saturated today that does not mean that it cannot absorb additional supply going forward to meet anticipated improvements in the product or to meet forecast increases in population and income. Moreover, even population and income are malleable to the extent that gaming facilities can attract out-of-market tourists, such as leisure and business travelers, which artificially increases population and income beyond the numbers reported in U.S. Census Bureau and U.S. Bureau of Economic Analysis data. Saturation is a constantly moving and malleable target and not a fixed point on a supply and demand graph.

Northeastern Casino Gaming Update, 2015

Pyramid Associates, LLC

For example, most models used to forecast gross gaming revenue for regional gaming markets, and for individual casinos, normally rely on some measure of the propensity to gamble. One measure of the propensity to gamble is the percentage of the adult population that visits a casino at least once in the previous 12 months. In 2012, thirty-four percent (34%) of the adult population (aged 21+) in the United States visited a casino in the previous twelve months compared to seventeen percent (17%) in 1990 (American Gaming Association 2013; Harrah's 2006). As Class III casino gaming has expanded from 2 states in 1978 to 39 states in 2014, the average propensity to gamble has increased in conformity with Say's Law that "supply creates its own demand" (Shim and Siegal 1995, 307). While Say's Law may overstate the case, there is no question that as casino gambling has become more convenient for Americans, the propensity to gamble (i.e., demand) steadily increased as more and more casinos opened in non-traditional jurisdictions (i.e., outside Nevada and New Jersey) beginning in 1989.

Moreover, the propensity to gamble can vary widely from state to state based on the number and quality of casinos and their proximity to population centers. The last time state by state propensity estimates were published by Harrah's Entertainment, Inc. in 2006, the propensity to gamble ranged from a low of 9.3% in North Carolina to a high of 41.9% in Louisiana and 43.7% in Nevada (Harrah's 2006, 22-24). There is an obvious correlation between the propensity to casino gamble and the extent to which casino gambling is available in a particular state, as well as the average drive time that residents of a particular state must travel to reach a casino.

Figures on the propensity to gamble and casino expenditures in New England, illustrate this basic principle, which underlies most forecasting models for casino gaming. There is a clear relationship between functional distance -- or convenience -- and expenditures on gaming, particularly spending on slot machines and video lottery terminals. When looking only at per capita gaming expenditures (i.e., not including non-gaming expenditures), it is clear that the more proximate to a casino, and the more options available within a primary market area (i.e., 60 minutes), the higher the level of per capita expenditures on casino gaming. In New England, Rhode Islanders spent \$577 per capita (age 21+) on casino gaming in CY 2012, followed by residents of Connecticut (\$407), Massachusetts (\$182), Maine (\$116), New Hampshire (\$66), and Vermont (\$21) (see Table 2). There is clearly a great deal of variability in per capita expenditures on casino gaming, but it is clear that one local factor is convenience and supply.²³

Table 2

| PER CAPITA TOTAL SPENDING BY STATE: ALL NEW ENGLAND CASINOS & RACINOS, CY 2012 | | | | | | |
|--|------------------------|----------------------------|------------------------------|------------------|-----------|------------|
| State | Foxwoods & Mohegan Sun | Twin River & Newport Slots | Hollywood and Oxford Casinos | Grand Total | Age 21+ | Per Capita |
| RI | \$176,274,805 | \$269,457,557 | 245,265 | \$ 445,977,627 | 771,477 | \$578 |
| CT | \$1,064,749,252 | \$4,707,875 | 290,911 | \$ 1,069,748,038 | 2,604,478 | \$411 |
| MA | \$554,425,141 | \$295,254,471 | 3,047,144 | \$ 852,726,756 | 4,823,404 | \$177 |
| ME | \$24,906,720 | \$527,011 | 90,571,476 | \$ 116,005,207 | 998,947 | \$116 |
| NH | \$50,417,988 | \$2,798,985 | 5,424,232 | \$ 58,641,205 | 970,653 | \$60 |
| VT | \$7,794,339 | \$0 | 536,177 | \$ 8,330,516 | 626,431 | \$13 |

Sources: Barrow and Borges (2013); 2010 American Community Survey (U.S. Census).

A second measure of the propensity to gamble is the percentage of disposable personal income that is spent on particular forms of gaming. In 2006, at the peak of the U.S. casino gaming market, Americans spent 0.616% of their disposable personal income on all forms of casino gambling, including commercial casinos, racetrack casinos, video lottery terminals, Class III Indian casinos, and card rooms offering poker and blackjack. By 2009, at the trough of the Great Recession, the ratio of DPI spent on casino gambling had fallen to 0.540%.²⁴ Casino gamblers behaved like rational actors and reduced their discretionary spending on this leisure activity at a time of job losses and economic uncertainty. While this may seem like a comparatively trivial decline, when applied to trillions of dollars in disposable personal income, this figure parallels the decline in gross gaming revenue nationally during this time. These figures also provide an aggregate range for what one might anticipate in the future as the casino industry

²³ For example, in 2005, 9.1% of Maine's adult residents report visiting a casino in the last twelve months, when the only regional options for casino gambling were located in Rhode Island and Connecticut (Harrah's 2006). After casinos opened in Bangor, Maine (2006) and Oxford, Maine (2012), the propensity to gamble increased with 21% of Maine's adult residents now reporting they visited a casino at least once in the last twelve months (Barrow and Borges 2013b, 1).

²⁴ Calculated from data in Christiansen (2006, 2009) and U.S. Bureau of Economic Analysis (2006, 2009).

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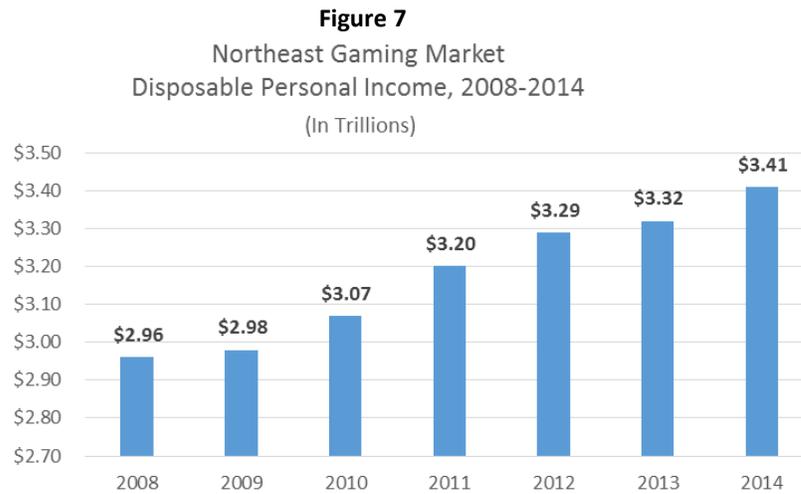
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more closely tracks the business cycle. It also provides a basis for analyzing the potential for saturation in the Northeastern gaming market.

First, gross gaming revenue in the Northeast, including both Indian and commercial gaming follow the same trend as GGR nationally. Gross gaming revenues reach a trough of \$12.2 billion in CY 2009 – the same year as the trough of the Great Recession – and then began a recovery in CY 2010 (\$12.3 billion) and reach \$14.7 billion in CY 2014. Gross gaming revenue increased by \$2.1 billion (+16.7%) from CY 2008 to CY 2014 (see Figure 6).

Figure 6
Gross Gaming Revenue of Northeast Casinos, CY 2008 to CY 2014





Source: U.S. Bureau of Economic Analysis; Pyramid Associates

During this same period, disposable personal income in the Northeast increased by nearly \$450 billion -- from just under \$2.96 trillion in CY 2008 to an estimated \$3.41 trillion in CY 2014 (see Figure 7). This means that at an average propensity to gamble of 0.54% of DPI, a simple gravity model would forecast that gross gaming revenue would increase in the Northeast by \$2.4 billion, when in fact it increased by \$2.1 billion. In other words, the Northeastern gaming market performed at a near average level for recessionary conditions – not at a crisis level – as it continued to grow in tandem with growth in disposable personal income (and it did so without drawing a larger share of income from other areas of the regional economy).

Furthermore, expenditures on casino gambling in the Northeast actually consumed only 0.43% of disposable personal income in CY 2008 and 0.43% of disposable personal income in CY 2014. The ratio of gambling expenditures by casino patrons has remained constant in the Northeast, although it is also well below the national average of 0.54% of DPI reached in 2009 and it is even further below the peak national average of 0.616% of DPI reached in 2006.²⁵ Thus, if the Northeastern gaming market was to perform at a level comparable to the current national average (0.54%), a simple gravity model would forecast CY 2014 gross gaming revenues of \$18.4 billion as compared to the actual figure of \$14.7 billion. Should the Northeastern gaming market ever perform at the average level established in 2006, then one would expect gross gaming revenues of up to \$20.9 billion. At a minimum, one can anticipate new organic growth in the Northeastern gaming market (i.e., population and income) and new demand stimulated by additional supply near major urban centers.

However, new and organic growth in the Northeastern gaming market does not mean that all boats will be lifted by a rising tide as demonstrated by the period from CY 2008 to CY 2014. Even though the total Northeastern gaming market increased by \$2.1 billion during this time, there was an on-going dynamic shifting of market shares on a state-by-state basis primarily at the expense of the legacy states, which entered the market early and enjoyed the benefits of near monopoly conditions until recently.

As Figure 8 and Figure 9 illustrate, many states, including New York (2004), Maine (2005), Pennsylvania (2007), Maryland (2010), and Ohio (2012) saw their share of the Northeast gaming market increase by several percentage points as they introduced casino gaming for the first time, expanded supply in the form of new venues, and/or added table games aimed at recapturing gamblers from states -- Connecticut (1992), Delaware (1995), New Jersey

²⁵ A part of this difference may be due to the fact that many of the Northeast’s metropolitan areas – New York City (No. 1), Philadelphia (No. 6), Hartford-New Haven (No. 14), and Boston (No. 16) -- are among the top 20 feeder markets to Las Vegas, see Harrah’s (2006, 21) and it is not likely that all of these expenditures can be recaptured by local or regional casinos.

(1978), and West Virginia (1994) -- that had entered the market earlier.²⁶ Delaware and Rhode Island mitigated or offset this impact by adding table games to their casinos early in the developing casino arms race (see Figure 8). Thus, new entrants to the market have successfully recaptured gaming revenue from adjacent states, particularly from Connecticut and New Jersey, but they have also increased the total size of the gaming market by generating new demand or by meeting underserved local demand for casino gaming.

Figure 8

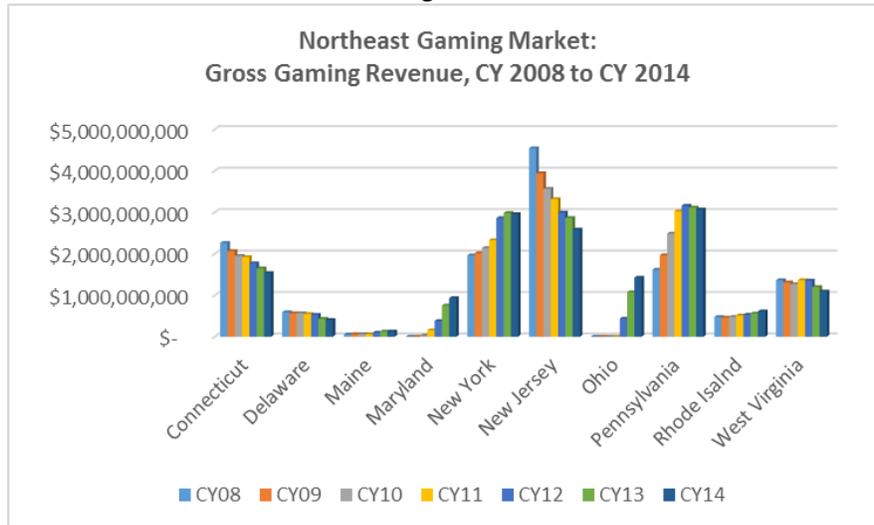
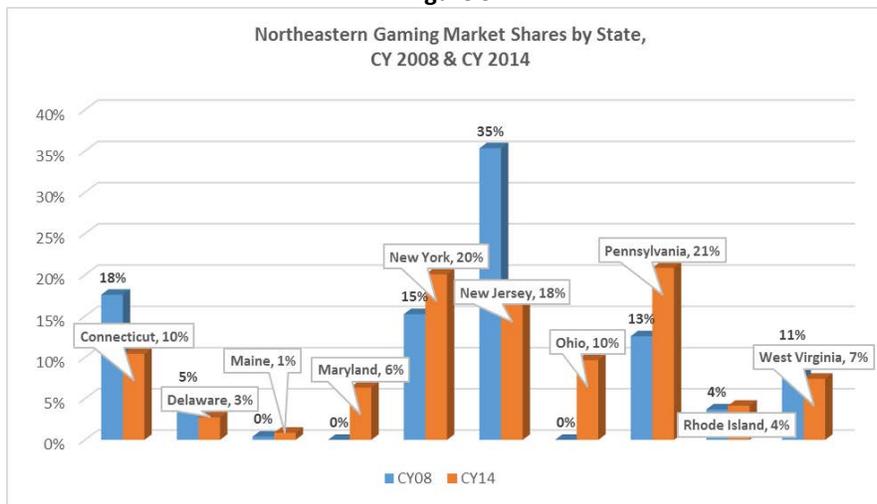


Figure 9



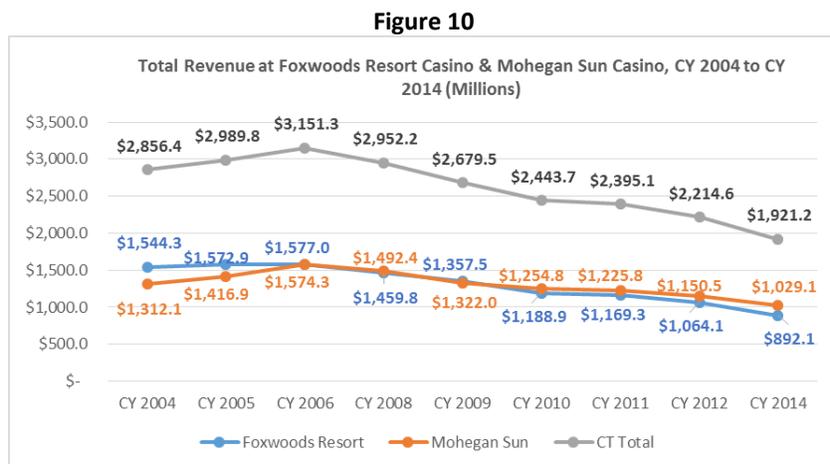
²⁶ Dates in parentheses are dates of first casino opening in the state, see, AGA (2013, 11-22).

Focus: Impact on Connecticut

Foxwoods Resort Casino and Mohegan Sun Casino were the two largest casinos in the world until 2010, when Resorts World Senosa and Marina Bay Sands opened in Singapore. Until recently, the Connecticut’s two behemoth casinos remained the largest in the Western Hemisphere until they were quietly surpassed by WinStar World Resort in Thackerville, Oklahoma. This change in status is not only because newer and larger casinos have been constructed elsewhere in the world, but because increased gaming competition in the Northeast, as well as the lingering impact of the Great Recession, has resulted in eight consecutive year-to-year declines in gross gaming revenue and total revenue (gaming + non-gaming) for the two casinos (see Figure 10).²⁷

Total revenues for the two casinos combined has declined by 39%, or by \$1.2 billion in the last eight years, from \$3.2 billion in CY 2006 to \$1.9 billion in CY 2014. Total revenues at Foxwoods Resort Casino declined by 43%, or by \$685 million in the last eight years, from \$1.6 billion in CY 2006 to \$892 million in CY 2014. Total revenues at Mohegan Sun Casino declined by 35%, or by \$545 million in the last eight years, from \$1.6 billion in CY 2006 to \$1.0 billion in CY 2014 (see Figure 10).²⁸

The revenue decline at Connecticut’s two casinos has resulted in a significant workforce reduction at both casinos. Foxwoods Resort Casino employed 12,800 persons at its 2006 peak, but currently employs 7,558 persons (-40.9%). Mohegan Sun employed 10,500 persons at its 2006 peak, but currently employs 7,205 persons (-31.4%). This is a combined loss of 8,537 jobs since 2006, although many of these jobs have actually been transferred to new gambling venues in New York, Pennsylvania, Rhode Island, and Maine.



The end of the revenue erosion at Connecticut’s two casinos remains elusive as Massachusetts and New York prepare to enter the resort casino market over the next 3 years. A significant portion of the revenue decline is a direct result of increased competition in the Northeastern gaming market. As reported in previous Gaming Updates, visitors from Pennsylvania to Connecticut’s two casinos have almost completely disappeared as that state has opened 12 casinos since 2006. Similarly, New York has opened 9 racetrack casinos since 2005, which reported Fiscal Year 2014 net win of \$1.7 billion. As New York has steadily expanded its presence in the Northeastern gaming market, casino expenditures in Connecticut by New Yorkers have declined from a peak of

²⁷ Gross Gaming Revenue (GGR) is the total amount of gaming revenue (win) retained by a casino during a day, month, or year. GGR is the figure most commonly used to determine what a casino, racetrack, lottery, or other gaming operation keeps *before* taxes, operating costs, and other expenses are paid by the casino. GGR is the equivalent of sales in other industries and should not be confused with profit or cash flow. Total Revenue (TR) consists of gross gaming revenue, plus non-gaming revenues, including hotel, food and beverage service, retail shops, conference and meeting services, and entertainment venues. The Northeastern Gaming Research Project did not prepare updates for 2007 or 2013, although both casinos reported revenue declines in those years.

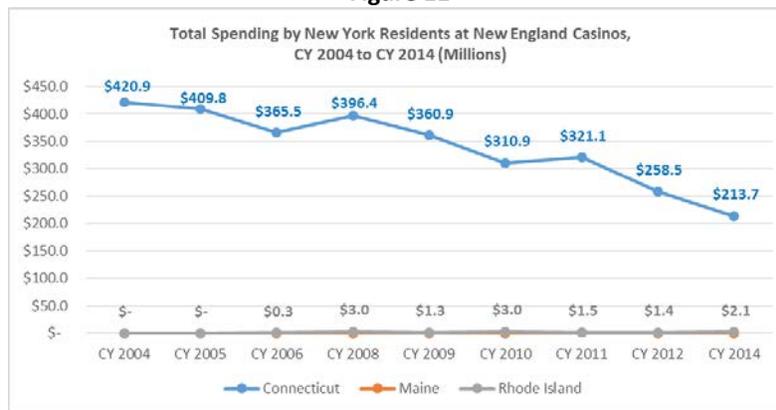
²⁸ All data in Figures 10-15 is tabulated from the *Northeastern Casino Gaming Updates, 2004-2014*.

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\$420.9 million in CY 2006 to \$213.7 million in CY 2014 (-49.2%) (see Figure 11).

Figure 11



After a referendum to open a resort casino in West Warwick, Rhode Island was defeated in 2006, the Ocean State has systematically repositioned Twin River Casino by adding additional video lottery terminals, expanding non-gaming amenities, and adding table games for the express purpose of attracting more visitors from Massachusetts. Given its geographic location, Twin River is well positioned to intercept casino patrons from central and eastern Massachusetts before they reach Connecticut. This strategy has been quite successful as the expenditures at Twin River by Massachusetts residents has increased from \$182.2 million in CY 2006 to \$334.5 million in CY 2014 (+83.6%). During the same period, expenditures by Massachusetts residents at Connecticut's two casinos has fallen from a peak of \$889.3 million in CY 2005 to \$475.6 million in CY 2014 (-46.5%) (see Figure 12).

Figure 12

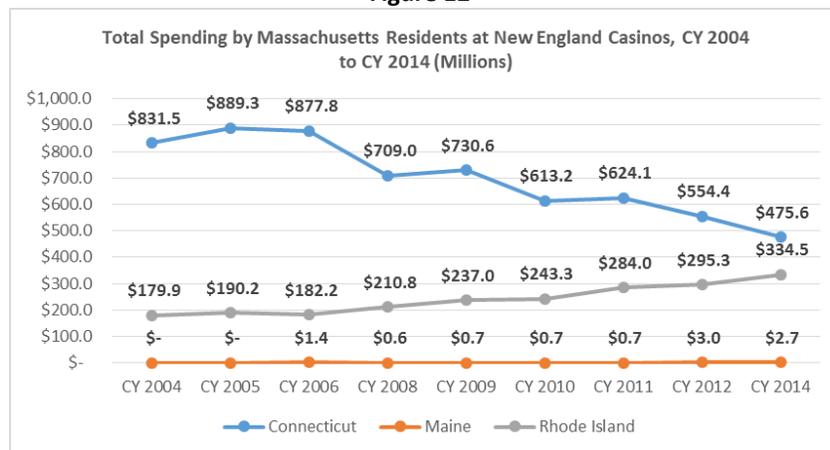
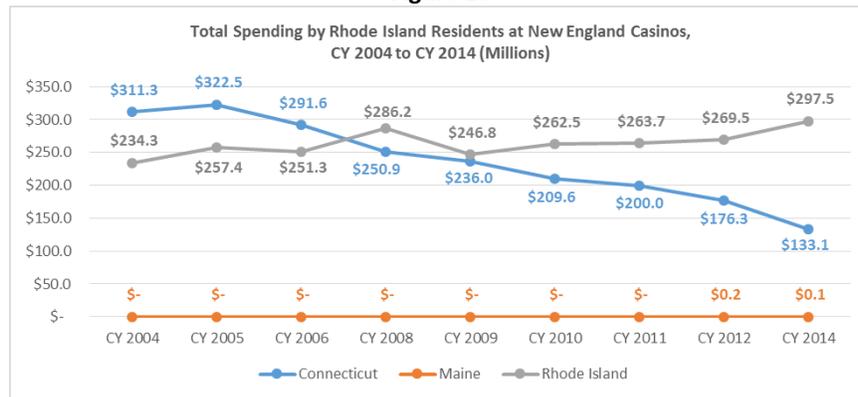


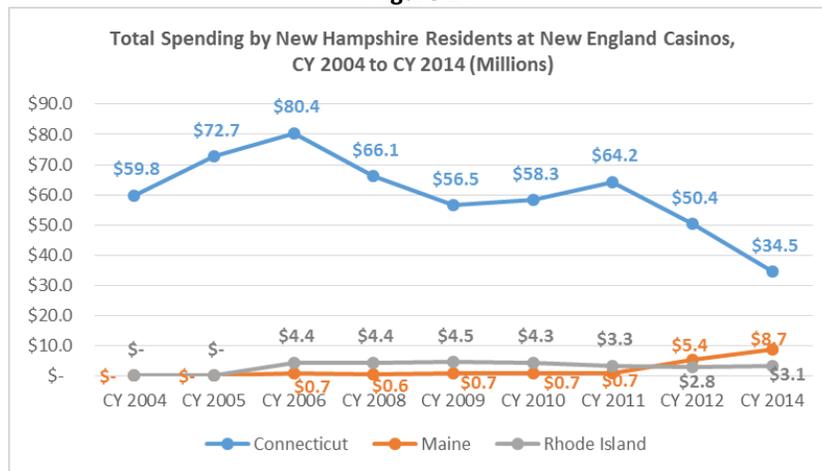
Figure 13



Similarly, spending by Rhode Island residents at Connecticut’s two casinos has dropped from a peak of \$322.5 million in CY 2005 (a year before the first Twin River expansion) to \$133.1 million in CY 2014 (-58.7%) (see Figure 13). During the same period, spending by Rhode Island residents at Twin River has increased from \$257.4 million in CY 2005 to \$297.5 million in CY 2014 (+40.1%).

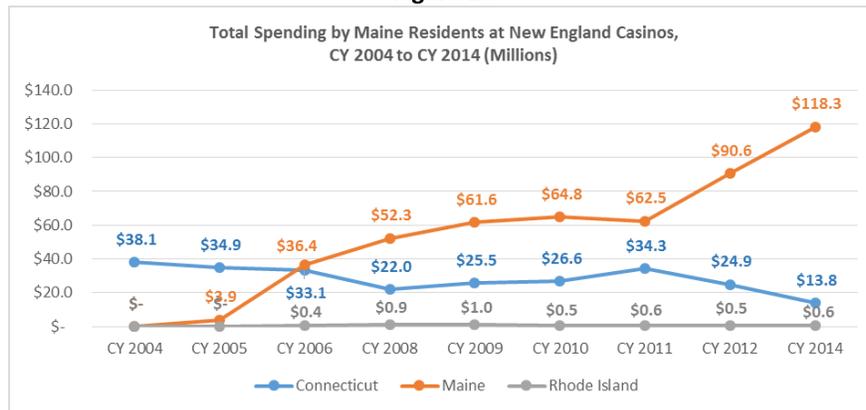
Finally, the introduction of casino gaming in Maine has also had a small impact on visits and expenditures at Connecticut’s two casinos. The Pine State has licensed two casinos, which opened in late 2005 and 2012. Spending by New Hampshire residents at Connecticut’s two casinos has fallen from a peak of \$80.4 million in CY 2006 to \$34.5 million in CY 2014 (-57.1%). During the same period, spending by New Hampshire residents at Maine’s two casinos has increased from \$0 in CY 2005 to \$8.7 million in CY 2014. Spending by New Hampshire residents at Twin River has also increased from \$0 in CY 2005 to \$3.1 million in CY 2014 (see Figure 14).

Figure 14



Spending by Maine residents at Connecticut’s two casinos declined from a peak of \$38.4 million in CY 2004 (the year before Hollywood Casino Bangor opened) to \$13.8 million in CY 2014 (-63.8%). During the same period, spending by Maine residents at Maine’s two casinos has increased from \$3.9 in CY 2005 to \$118.3 million in CY 2014 +(4,462%). Spending by Maine residents at Twin River has also increased from \$0 in CY 2005 to \$0.6 million in CY 2014 (see Figure 15).

Figure 15



Despite the impact of increased competition in the Northeastern gaming market, only about one-half of the decline in Connecticut casino revenues can be accounted for by displacement and cannibalization. There is evidence from our previous gaming behavior surveys that the propensity to gamble in key feeder states, such as Massachusetts, declined during the Great Recession and its aftermath as consumers began hoarding cash (i.e., increasing the personal saving rate) and simultaneously redirected a portion of their discretionary income into consumer staples, such as gasoline and food, which were increasing in price during this time (Barrow and Borges 2014). Discretionary income was also redirected toward paying down revolving consumer debt during this time. Consequently, the impact of the Great Recession on the casino gaming industry did not cease with the technical end of the recession in 2010, but is only now starting to unwind with declining gasoline prices, rising home prices, increasing consumer confidence, and a decline in the personal saving rate. However, despite an improving business climate for the regional casino industry, one can anticipate additional displacement impacts as a result of expanded gaming in New York and Massachusetts. Based on the 2014 patron origin analysis alone, it is possible that up to one-third of the Connecticut casino’s remaining customer base, including residents living in the Greater Hartford area could be lost to new competition – all things remaining the same.

Summary of 2014 Patron Origin Analysis

The Northeastern Gaming Research Project updated its New England patron origin and fiscal impact analysis for calendar year 2014. The update applies new patron origin ratios from February 2015 to calendar year 2014 financial data. The update includes new patron origin and financial data for the six casino gaming venues in New England. The purpose of the 2015 patron origin study is to determine the geographic origin, expenditure patterns, and other gaming behaviors of visitors to Foxwoods Resort Casino in Ledyard, Connecticut; Mohegan Sun Casino in Uncasville, Connecticut; Twin River in Lincoln, Rhode Island; Newport Grand Slots in Newport, Rhode Island, Hollywood Casino Bangor, and Oxford Casino in Maine, including the percentage of casino and racino visitors who are residents of New England and Mid-Atlantic states.

The estimate of patron origins is based on a sampling of 8,443 private automobiles and 146 tour buses at Foxwoods; a sampling of 8,436 private automobiles and 150 tour buses at Mohegan Sun; 18,028 private automobiles at Twin River; 3,743 private automobiles at Newport Grand Slots; 7,100 private automobiles at Hollywood Casino Bangor; and 5,998 at Oxford Casino, Maine.²⁹

²⁹ Variations of patron origin analysis (Las Vegas Visitors & Convention Authority 2001; Meyer-Arendt 1998; Carstensen et al. 2000), including license plate counts have been used by researchers in Oregon, Mississippi, and Louisiana to ascertain the geographic, and even the demographic, profile of casino visitors (Whelan 1996; Drobnic 2000; Ryan 1999). Government agencies, academic research institutes, and private consultants have reliably used license plate counts in a wide range of marketing, travel, and tourism studies, e.g. Cox and Cooke (1970, 13); Wilbur Smith Associates (2003, 1-19), Knap & Barchers (2001, 21), Boston Metropolitan Planning Organization (2004), Fehr & Peers (2003), Municipality of Metropolitan Seattle (1991), (Wisconsin Department of Tourism (no date); Oregon State University (1997); Arizona Office of Tourism (2003, 2005); Kitakyushu City (2005); Government of Alberta (2005).

Financial data was obtained from the Connecticut Division of Special Revenue, the Rhode Island Lottery Commission, the Maine Department of Public Safety’s Gaming Control Board, and the U.S. Securities and Exchange Commission.³⁰

Casino Patron Origins

The total weighted estimates of patron origins, including both types of transportation, indicate that casino patrons originate from the following states:

| Estimated Patron Origins by State, 2015: Foxwoods, Mohegan Sun, Twin River, Newport Grand, Hollywood, & Oxford | | | | | | |
|---|----------|---------|------------|---------|-----------|--------|
| | Foxwoods | Mohegan | Twin River | Newport | Hollywood | Oxford |
| Massachusetts | 32.2% | 18.3% | 51.9% | 44.1% | 2.0% | 2.0% |
| Connecticut | 39.8% | 59.9% | 0.9% | 0.8% | 0.1% | 0.0% |
| Rhode Island | 11.0% | 3.4% | 45.1% | 52.1% | 0.1% | 0.1% |
| New Hampshire | 2.6% | 1.1% | 0.5% | 0.2% | 2.0% | 9.9% |
| Maine | 1.2% | 0.3% | 0.1% | 0.0% | 87.8% | 86.2% |
| Vermont | 0.5% | 0.4% | 0.0% | 0.0% | 0.3% | 0.5% |
| New York | 9.3% | 12.7% | 0.3% | 0.5% | 0.3% | 0.2% |
| New Jersey | 1.7% | 1.4% | 0.2% | 0.1% | 0.5% | 0.0% |
| Other | 1.7% | 2.5% | 1.0% | 2.2% | 6.9% | 1.1% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: Pyramid Associates, LLC. **Note:** The statistical margin of error for the Foxwoods, Mohegan Sun, Twin River, Newport, Hollywood, and Oxford surveys is +/- < 1%.

Connecticut

Total revenues for Calendar Year 2014 total (gaming + non-gaming) are estimated to be \$882.1 million for Foxwoods Resort Casino and \$1.0 billion for Mohegan Sun Casino. If the patrons from various states account for an equal or average per capita share of the two facilities’ annual total revenues,³¹ then it is estimated that:

- Massachusetts residents spent approximately \$475.6 million in CY 2014 at Connecticut’s two Native American casinos, compared to \$624.1 million in CY 2011 and \$876.2 million in CY 2006.
- Rhode Island residents spent approximately \$133.1 million in CY 2014 at Connecticut’s two Native American casinos, compared to \$200.0 million in CY 2011 and \$291.6 in CY 2006.
- New Hampshire residents spent approximately \$50.4 million in CY at Connecticut’s two Native American casinos, compared to 2012 \$64.2 million in CY 2011 and \$80.4 million in CY 2006.
- Maine residents spent approximately \$34.5 million in CY 2014 at Connecticut’s two Native American casinos, compared to \$34.3 million in CY 2011 and \$33.1 million in CY 2006.

³⁰ Mohegan Tribal Gaming Authority and Penn National, Inc., the owner of Hollywood Casino & Raceway in Bangor report financial and other data on U.S. Securities & Exchange Commission Form 10-K. Estimates for non-gaming revenue are based on proprietary data and modeling by Pyramid Associates, LLC.

³¹ This is a highly conservative assumption, but one that is consistent with the standard average or per capita cost method most commonly used in fiscal impact analyses, see Burchell, Listokin and Dolphin (1985). A review of the Center for Policy Analysis methodology conducted by scholars at the John F. Kennedy School of Government concludes that “these figures are conservative in that they assume that out-of-state visitors spend the same amount of time and money at the Connecticut casinos. Evidence from Louisiana indicates that out-of-state customers spend more time at a casino than in-state residents...even more might be recaptured than these calculations would indicate” (Taylor et al. 2002, 7).

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- New York residents spent approximately \$213.7 million CY 2014 at Connecticut's two Native American casinos, compared to \$321.1 million in CY 2011 and \$365.5 million in CY 2006.

Based on these figures, it is estimated that:

- Massachusetts residents contributed \$65.6 million to the Connecticut state treasury as a result of its citizens' gaming activity in that state.
- Rhode Island residents contributed \$18.3 million to the Connecticut state treasury as a result of its citizens' gaming activity in that state.
- New Hampshire residents contributed \$4.7 million to the Connecticut state treasury as a result of its citizens' gaming activity in that state.
- Maine residents contributed \$1.9 million to the Connecticut state treasury as a result of its citizens' gaming activity in that state.
- New York residents contributed more than \$29.8 million to the Connecticut state treasury as a result of its citizens' gaming activity in that state.

Rhode Island

Twin River's gross gaming revenue for Calendar Year 2014 was \$548.4, compared to \$462.7 million in CY 2011 and \$329.4 million in CY 2006. The net terminal income at Newport Grand Slots was \$45.2 million for Calendar Year 2014 compared to \$50.0 million in CY 2011 and \$77.1 million in CY 2006. The total estimated gaming and non-gaming expenditures at Twin River and Newport Grand Slots by Rhode Island residents was \$297.5 million in CY 2014, compared to \$263.7 million in CY 2011, and \$251.3 in CY 2006:

The total estimated gaming and non-gaming expenditures at Twin River and Newport Grand Slots by Massachusetts residents was \$334.5 million in CY 2014, compared to \$284.0 million in CY 2011, and \$182.2 million in CY 2006.

The total estimated gaming and non-gaming expenditures at Twin River and Newport Grand Slots by New Hampshire residents was \$3.1 million in CY 2014, compared to \$3.3 million in CY 2011, and \$0.9 million in CY 2006:

- Massachusetts residents contributed approximately \$185.7 million to the Rhode Island state treasury in CY 2014 as a result of its citizens' gaming and other gaming related expenditures in that state.
- Rhode Island residents contributed approximately \$165.4 million to the Rhode Island state treasury in CY 2014 as a result of its citizens' gaming and other gaming related expenditures in that state.
- New Hampshire residents contributed approximately \$1.7 million to the Rhode Island state treasury in CY 2014 as a result of its citizens' gaming and other gaming related expenditures in that state.

Maine

Hollywood Casino Bangor and Oxford Casino in Maine report slot machine handle and win and table games drop and win to the Maine Gaming Control Board on a monthly basis. Gross gaming revenues at Hollywood Casino were \$54.4 million in Calendar Year 2014, compared to \$59.5 million in CY 2011, and \$37.5 million in CY 2006.

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Gross gaming revenues at Oxford Casino were \$72.8 million in CY 2014, compared to \$36.5 million in Calendar Year 2012. The total estimated gaming and non-gaming revenues at Hollywood Casino Bangor was \$59.9 million in CY 2014, compared to \$65.5 million in CY 2011, and \$38.6 million in CY 2006.

It is estimated that non-gaming revenues account for approximately 4.6 percent of Oxford Casino's total revenues, or \$3.4 million. Thus, the total estimated gaming and non-gaming revenues at Oxford Casino was \$76.2 million in CY 2014.

If the patrons from various states account for an equal or average per capita share of the gaming facilities' annual total revenues, then it is estimated that:

- Maine residents spent approximately \$118.3 million in Calendar Year 2014 at Maine's two casinos, compared to \$62.5 million in CY 2011, and \$36.4 million in CY 2006 (see Appendix A).
- Massachusetts residents spent approximately \$2.7 million in Calendar Year 2014 at Maine's two casinos, compared to \$655,000 in CY 2011 and \$1.4 million in CY 2006.
- New Hampshire residents spent approximately \$8.7 million in Calendar Year 2014 at Maine's two casinos, compared to \$655,000 in CY 2011, and \$1.4 million in CY 2006.

Based on these figures, it is estimated that:

- Maine residents contributed approximately \$23.8 million to the Maine general treasury and to the City of Bangor as a result of its citizens' gaming and other expenditure activity in that state.
- Massachusetts residents contributed approximately \$0.5 million to the Maine general treasury and to the City of Bangor as a result of its citizens' gaming and other expenditure activity in that state.
- New Hampshire residents contributed approximately \$1.7 million to the Maine general treasury and to the City of Bangor as a result of its citizens' gaming and other expenditure activity in that state.

NORTHEASTERN CASINO GAMING 2015 UPDATE

1.00 PURPOSE OF THE STUDY

The Northeastern Gaming Research Project has updated its New England patron origin and fiscal impact analysis for calendar year 2014. The update applies new patron origin ratios from February 2015 to calendar year 2014 financial data. The update includes new patron origin and financial data for the six casino gaming venues in New England. The purpose of the 2015 patron origin study is to determine the geographic origin, expenditure patterns, and other gaming behaviors of visitors to Foxwoods Resort Casino in Ledyard, Connecticut; Mohegan Sun Casino in Uncasville, Connecticut; Twin River in Lincoln, Rhode Island; Newport Grand Slots in Newport, Rhode Island, Hollywood Casino Bangor, and Oxford Casino in Maine, including the percentage of casino and racino visitors who are residents of New England and Mid-Atlantic states.³²

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Financial data was obtained from the Connecticut Division of Special Revenue, the Rhode Island Lottery Commission, the Maine Department of Public Safety's Gaming Control Board, and the U.S. Securities and Exchange Commission.³⁴

1.10 STRUCTURE OF THE U.S. CASINO INDUSTRY

Casino gaming is a significant component of the leisure, hospitality, and entertainment industry in the United States with 39 states (2014) now hosting some type of Class III casino gaming. There are 925 casino gaming venues in the United States, including 461 Indian casinos and 464 commercial casinos (including race track casinos). Nearly half (43%) of all commercial casinos are now located in non-traditional jurisdictions (i.e., outside Nevada and New Jersey) and, if one includes Indian casinos, then seventy-one percent (71%) of all U.S. casinos are now located in non-traditional jurisdictions (AGA 2013; Meister 2014).

³² The methodology employed in the patron origin analysis has been validated by academic peer review and published by Jeffrey Dense and Clyde W. Barrow, "Estimating Casino Expenditures by Out of State Patrons: Native American Gaming in Connecticut," *Journal of Travel Research* (May 2003): 410-15. See also, Clyde W. Barrow and David R. Borges, "New England Casino Gaming Update: Patron Origin Analysis and a Critique of its Critics," *Gaming Law Review and Economics*, Vol. 14, No. 3 (2010): 175-86.

³³ Variations of patron origin analysis (Las Vegas Visitors & Convention Authority 2001; Meyer-Arendt 1998; Carstensen et al. 2000), including license plate counts have been used by researchers in Oregon, Mississippi, and Louisiana to ascertain the geographic, and even the demographic, profile of casino visitors (Whelan 1996; Drobnic 2000; Ryan 1999). Government agencies, academic research institutes, and private consultants have reliably used license plate counts in a wide range of marketing, travel, and tourism studies, e.g. Cox and Cooke (1970, 13); Wilbur Smith Associates (2003, 1-19), Knap & Barchers (2001, 21), Boston Metropolitan Planning Organization (2004), Fehr & Peers (2003), Municipality of Metropolitan Seattle (1991), (Wisconsin Department of Tourism (no date); Oregon State University (1997); Arizona Office of Tourism (2003, 2005); Kitakyushu City (2005); Government of Alberta (2005).

³⁴ Mohegan Tribal Gaming Authority and Penn National, Inc., the owner of Hollywood Casino & Raceway in Bangor report financial and other data on U.S. Securities & Exchange Commission Form 10-K. Estimates for non-gaming revenue are based on proprietary data and modeling by Pyramid Associates, LLC.

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All types of Class III casinos combined generated \$64.7 billion in gross gaming revenues in 2012 with \$50.8 billion (78.6%) of that amount accruing to venues outside the traditional jurisdictions of Nevada and New Jersey. It is estimated that total industry revenues (gaming and non-gaming) were approximately \$74 billion in 2012. The casino industry as a whole employed more than 670,000 people nationwide and made approximately \$10.2 billion in direct payments to state and local governments.³⁵ The percentage of adults who gambled at a casino at least once in the previous year has climbed from 17 percent in 1990 to 34 percent in 2012, when 76.1 million Americans made more than 400 million visits to casinos (Harrah's 2006; AGA 2013, 3). Moreover, since the late 1980s, when new casinos began opening in non-traditional jurisdictions, nearly 82 percent of the increase in casino visitations has occurred in non-traditional casino jurisdictions.

The significance of casino gaming within the leisure and hospitality sector is now recognized in the industrial classification system used by the United States Government to collect data on employment, wages, and business establishments. In 1997, the United States began phasing out the old Standard Industrial Classification (SIC) System, which had been designed mainly for classifying business establishments in an industrial economy. The North American Industry Classification System (NAICS), which replaced the SIC system, was designed specifically to identify trends in "new and emerging industries" and to capture the growing importance of "service industries in general" in the new economy (Executive Office of the President 1997, 3).

NAICS classifies business establishments into twenty major Sectors with gaming establishments assigned to Sector 71 – Arts, Entertainment, and Recreation and Sector 72 -Accommodation and Food Services:

- Subsector 711. Performing Arts, Spectator Sports, and Related Industries
- Subsector 712. Museums, Historical Sites, and Similar Institutions
- Subsector 713. Amusement, Gambling, & Recreation
- Subsector 721120. Casino Hotels

It may seem odd for spectator sports, art museums, and casinos to be classified in the same major sector, but the rationale for this classification is that each provides a comparable service in the form of amusement or entertainment. A customer can be amused or entertained by a sporting event, an art exhibit, or a slot machine, and one can be equally disappointed if one's favorite sports team loses a game, if an art exhibit is uninspiring, or if a gambler has a bad day at the blackjack table. Each industry provides a service called amusement or entertainment.

Casinos and other gaming establishments were assigned their own six-digit NAICS Codes for the first time in 1997 and the new coding system explicitly differentiates between types of establishments by assigning different codes to Casinos (713210), Other Gambling Industries (713290, i.e., slot parlor/racinos), and Casino Hotels (721120) (see Table 3). Casino establishments include land-based casinos, riverboat casinos, dockside casinos, and cruise ships, which offer a wide range of slot machine games and table games. Resort casinos with hotels typically offer the same gambling options, but also offer non-gambling amenities, such as high-end designer retail outlets, gourmet dining establishments, dance clubs, comedy clubs, cabarets, concert and sporting arenas, spas, golf courses, and meeting and conference facilities. Other Gambling Industries consists primarily of so-called racinos or slot parlors, where slot machines or video lottery terminals (VLTs) are installed at an existing pari-mutuel facility, such as a dog track, horse track, or jai-alai fronton.

³⁵ Calculated from data in Alan Meister, *Indian Gaming Industry Report* (Newton, MA: Casino City Press, 2013) and American Gaming Association, *State of the States, 2013* (Washington, D.C., 2013). The reported tax payments and revenue sharing do not include corporate income taxes, sales, meals, and lodging taxes, property taxes, and other license and fee payments.

Table 3

| NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM | |
|--|---|
| 711212 Racetracks | Comprises establishments primarily engaged in operating racetracks. These establishments may also present and/or promote the events, such as auto, dog, and horse races, held in these facilities. |
| 713210 Casinos (except Casino Hotels) | Comprises establishments primarily engaged in operating gambling facilities that offer table wagering games along with other gambling activities, such as slot machines and sports betting. These establishments often provide food and beverage services. Included in this industry are floating casinos (i.e., gambling cruises, riverboat casinos). |
| 713290 Other Gambling Industries | Comprises establishments primarily engaged in operating gambling facilities (except casinos or casino hotels) or providing gambling services. Included in this industry are bingo, off-track betting, card rooms, and slot machine parlors. |
| 721120 Casino Hotels | Comprises establishments primarily engaged in providing short-term lodging in hotel facilities with a casino on the premises. The casino on premises includes table wagering games and may include other gambling activities, such as slot machines and sports betting. These establishments generally offer a range of services and amenities, such as food and beverage services, entertainment, valet parking, swimming pools, and conference and convention facilities. |

Thus, the casino industry is actually differentiated into many niche markets that are distinguished by the type of facility, size of facility, consumer demographics, and customer motivation. The economic, fiscal, and social impacts of the industry can vary widely from state to state depending on the particular configuration of casino establishments and whether a state’s gaming policy allows essentially unrestricted market entry (subject to licensing), such as Nevada, New Jersey, and Mississippi, or whether a state limits market entry to a fixed number of establishments at pre-determined locations (e.g., Massachusetts, Michigan). The economic, fiscal, and social impacts of the industry can also vary depending on whether a state hosts state-licensed and regulated commercial casinos or Indian casinos that operate under federal laws and tribal ordinances.

1.20 THE NEW ENGLAND CASINO INDUSTRY

Casino gaming is a \$2.7 billion sector of the leisure, hospitality, and entertainment industry in New England, with two tribal casinos in Connecticut, a commercial casino and one slot parlor in Rhode Island, and two commercial casinos in Maine.³⁶ The industry employs approximately 16,997 people in New England. The casino industry made \$638.1 million in tax and revenue sharing payments to state governments in calendar year 2014 (see Table 4).³⁷

³⁶ Twin River began offering live table games on June 19, 2013.

³⁷ This figure only includes gaming taxes paid to states. It does not include sales and meals taxes, and lodging taxes generated by casino patrons, nor does it include payments for licensing fees, corporate income taxes, payroll taxes (e.g., unemployment insurance), local property taxes, payments in lieu of taxes made to local host communities, or any federal tax payments.

Table 4

| New England Casino Revenues & Employment, CY 2014 | | | | | | | |
|---|-----------------|---------------|-----------------|---------------|-----------------|--------------------------|------------------|
| | Slot Win | Other Gaming | Total Gaming | NonGaming | Total Revenues | Payments to St/Loc Govts | Total Employment |
| Foxwoods | \$483,559,416 | \$207,446,989 | \$691,006,405 | \$201,082,864 | \$892,089,269 | \$120,889,855 | 7,558 |
| Mohegan Sun | \$583,912,203 | \$261,008,755 | \$844,920,958 | \$184,192,769 | \$1,029,113,727 | \$145,978,050 | 7,205 |
| Twin River | \$466,015,784 | \$82,419,476 | \$548,435,260 | \$54,295,091 | \$602,730,351 | \$301,470,608 | 1,200 |
| Newport Grand | \$45,179,615 | N/A | \$45,179,615 | \$4,066,165 | \$49,245,780 | \$27,559,565 | 155 |
| Hollywood | \$46,410,579 | \$8,026,814 | \$54,437,393 | \$5,498,177 | \$59,935,570 | \$13,024,456 | 459 |
| Oxford | \$58,368,047 | \$14,464,188 | \$72,832,235 | \$3,350,283 | \$76,182,518 | \$29,163,571 | 420 |
| Total | \$1,683,445,644 | \$573,366,222 | \$2,256,811,866 | \$452,485,349 | \$2,709,297,215 | \$638,086,105 | 16,997 |

Sources: Connecticut Division of Special Revenue; Rhode Island Lottery; Maine Gambling Control Board; Pyramid Associates, LLC.

1.21 CONNECTICUT

Foxwoods Resort Casino and Mohegan Sun Casino offer traditional slot machines and table games for their customers’ entertainment. Foxwoods Resort Casino is operated by the Mashantucket Pequot Tribe of Connecticut.³⁸ Mohegan Sun Casino is operated by the Mohegan Tribe of Indians of Connecticut.³⁹ Both casinos operate under the provisions of the Indian Gaming Regulatory Act of 1988, including procedures and regulations approved or adopted by the United States Department of the Interior and the National Indian Gaming Commission (NIGC 2008a).

Foxwoods is currently the second largest gaming facility in the United States in terms of total gaming positions and gaming space. Mohegan Sun is the third largest gaming facility in the United States in terms of total gaming positions, but in the 2008 calendar year Mohegan Sun surpassed Foxwoods Resort Casino in gross gaming revenue, after surpassing it in total revenues (gaming + non-gaming) for the first time in 2007.⁴⁰ In calendar year 2014, Connecticut’s two casinos had combined gross gaming revenues of \$1.5 billion, employed approximately 14,763 people, and paid \$268 million to the Connecticut general treasury under the terms of tribal-state gaming compacts that require the casinos to share 25 percent of the monthly slot win with the State of Connecticut (NIGC 2008b).

1.21a Foxwoods Resort Casino



In 1986, the Mashantucket Pequot Tribal Nation opened a high stakes bingo hall, which became the platform for launching Foxwoods Resort Casino. Foxwoods Resort Casino is located in Ledyard, Connecticut, approximately 8 miles off Interstate 95 via Route 2. Foxwoods opened on February 15, 1992 and is the largest resort casino in the Western Hemisphere by space with 340,000 square feet of gaming space located within a larger resort complex that covers 4.7 million square feet. On average, about 40,000 people visit Foxwoods Resort each day. The resort is open 24 hours a day and 365 days a year.

Foxwoods has six casinos with an average of 5,693 slot and video poker machines. Its six casinos offer 330 table games, including 104 poker tables, with 15 different types of games, including baccarat, blackjack, craps, roulette,

³⁸ The casino’s name is derived from the tribe’s name. Pequot means “the fox people” and Mashantucket means “much wooded land” (Jacobson 2007).

³⁹ The name Mohegan Sun is a blending of the two groups in the original development agreement: the Mohegan Tribe and Sun International (Jacobson 2007).

⁴⁰ In 2013, Foxwoods and Mohegan Sun were displaced as the largest casinos in the United States by WinStar World Casino & Resort in Thackerville, Oklahoma, which has more than 7,400 electronic gaming devices spread across 8 gaming plazas, see, <http://www.winstarworldcasino.com/electronic-games/>.

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multiple types of poker, pai gow, and wheel of fortune. Other games include keno, pull tabs, and a race book. Foxwoods also has the world's largest bingo hall.

Foxwoods has 1,416 guest rooms and suites at its Grand Pequot Tower (824 rooms), Great Cedar Hotel (312 rooms), and Two Trees Inn (280 rooms). The Villas at Foxwoods, located within the Grand Pequot Tower, has 23 luxurious custom-designed suites located on the 22nd and 23rd floors. These suites average 1,400 square feet and include living rooms, wet bars, Jacuzzi tubs, large screen TVs and 24-hour butler service.

There are 31 food and beverage outlets, including gourmet restaurants, casual dining establishments, express services, bars, lounges, and a buffet. The 1,400-seat Fox Theater is a major entertainment venue that attracts rock bands, singers, championship boxing, and other entertainers. A night club and dance club are also located on the premises.

Foxwoods also operates a 55,000 square foot ballroom and a 30,000 square foot junior ballroom with 25 conference rooms. Its complex features a video game arcade, banquet hall, valet parking, Hard Rock Café, and a Grand Salon and Spa that offers beauty treatments and exercise facilities. Foxwoods also operates the adjacent Lake of Isles, which features two 18-hole upscale public golf courses. In addition, Foxwoods offers first-class shopping with 25 retail outlets that sell men's and women's fashion apparel, accessories and jewelry, high-quality merchandise produced by Native Peoples from throughout the Americas, flowers, candy, children's clothing, toys, perfumes, and gift cards.

In November 2005, Foxwoods announced a 3-year \$700 million expansion project just months after completing a 2-year \$100 million expansion.⁴¹ On December 8, 2006, the Mashantucket Pequot Tribe and MGM Mirage, Inc. announced that they had completed agreements that included the development of a new hotel and casino as part of the on-going expansion. The partnership features a new MGM hotel tower with 824 rooms and suites, and another 21,000 square foot spa, as well as a new 50,000 square foot casino. In November 2007, Foxwoods announced an additional \$55 million investment to add more restaurants and shops to MGM Grand at Foxwoods. The new hotel and casino, which opened on May 17, 2008, was originally branded as the "MGM Grand at Foxwoods" even though it was owned and operated by the Mashantucket Pequot Tribe, with marketing and other services available under license from MGM Mirage. In October 2013, , MGM Resorts International and the Mashantucket Pequots ended their licensing agreement. The hotel and casino was renamed The Fox Tower.

The MGM Grand at Foxwoods project added 2 million square feet to its 4.7 million square foot resort complex, including 50,000 square feet of new gaming space. However, a major focus of the expansion was the construction of new meeting facilities for corporate retreats, meetings, and conferences that will compete for the region's convention business. In fact, on a square footage basis, more than 97 percent of the MGM expansion was devoted to additional non-gaming amenities, rather than gaming space. The expansion brings the resort's total meeting and convention space to 170,000 square feet. A 4,000 seat Performing Arts Theater, two nightclubs, three lounges, four restaurants with casual to upscale dining, and four retail outlets were also added to Foxwoods. Following the termination of their licensing agreement with MGM, Foxwoods also started construction on an 85-store outlet mall adjacent to the casino. The \$120 million mall, named Tanger Outlet Mall at Foxwoods, is set to open May 2015. The outlet mall will focus on high-end luxury brands to attract upscale customers.

On September 17, 2010, Foxwoods opened a High Rollers bowling alley with a lounge, marble-topped bar, six VIP bowling lanes, and 14 more regular lanes. The bowling alley includes private function rooms, four Brunswick Gold Crown billiard tables, and over 60 high-definition television sets throughout the facility. In October of 2010, Comix also opened at Foxwoods with live comedy entertainment. According to William Sherlock, former Foxwoods CEO, the new additions continue to implement the company's long-term strategy of "building up its Connecticut brand" and changing the mix between gaming and non-gaming revenues to a ratio similar to that of the major Las Vegas

⁴¹ In May 2005, the Mashantucket Pequot Tribe completed the construction of two golf courses and a clubhouse. It subsequently opened eight golf villas and a golf academy.

casino resorts.

However, while building the largest casino in the Western Hemisphere by physical size, the Mashantucket Pequots also acquired more casino-related debt than any Native American tribe in the United States. The Pequots had a \$700 million revolving loan due in July 2010, \$500 million in 8.5 percent bonds that mature in 2015, and \$250 million of 5.912 percent bonds due in 2021. The Tribe also owed money to Kien Haut, a Malaysian investment company that financed Foxwoods' original development and receives a share of its revenues until the debt is paid.⁴² The Tribe also owed \$685.2 million in special revenue obligations and \$375.1 million in subordinated special revenue obligations as of June 30, 2007 (Jinks 2009), which leads most analysts to conclude that there may be as much as \$2 billion in outstanding debt on Foxwoods Resort Casino (Jinks 2009; Hallenbeck 2010).

Foxwoods' revenues peaked in 2006, and they have eroded each year since that time, as a result of the Great Recession and increased competition in the Northeast. Consequently, the Mashantucket Pequot Tribal Council announced on August 28, 2009 that they were seeking "a mutually beneficial resolution with its banks and bondholders" on restructuring at least \$1.45 billion in debt (Jinks 2009).⁴³ The same day the Tribe announced that it had hired Miller Buckfire & Co., a New York investment bank, and the law firm of Weil, Gotshal & Manges as advisers. The news prompted Moody's Investors Service and Standard & Poor's to cut their ratings on the tribe's debt to high risk.

Subsequently, at the end of 2009, the Mashantucket Pequot Tribe failed to pay about \$7 million of interest on its \$500 million in 8.5 percent bonds, which put the tribe in default. On July 13, 2010, the Pequots also missed a deadline to repay a \$700 million credit line from its banks, although the banks agreed to forbear while the Tribe attempted to strike a deal with bondholders, who are subordinate to its bank creditors, which include Bank of America and Wells Fargo (Spector and Berzon 2010).

Shortly after the credit line default, Michael Thomas, the former chairman of the Mashantucket Pequot Tribal Council, stirred national concerns among banks and bondholders about a potential sovereign default crisis in the Indian casino industry by suggesting that its \$2 billion in credit and debt might go unpaid in order to protect per capita distributions to tribal members of up to \$120,000 per year (Spector and Berzon 2010). As sovereign governments, banks and bondholders cannot foreclose on tribal assets and the Indian Gaming Regulatory Act prohibits anyone but Indian tribes from having an ownership stake in tribal casinos.

The Mashantucket Pequot Tribal Council quickly removed Chairman Thomas, and also suspended per capita payments to tribal members, which immediately reduced the tribe's annual payouts by \$30 million to \$40 million, but thus far there has been no long-term or permanent resolution of the Tribe's debt crisis.

Nevertheless, on February 15, 2012, the 20th anniversary of Foxwoods' grand opening, the casino launched a new marketing campaign that replaced "The Wonder of it All" moniker with "Anything but Ordinary." The new marketing push centers around five characters considered to be the typical Foxwoods customers: the Ace, who is smart, sophisticated, and serious; the King, who wants to be treated like royalty; the Queen, who likes to be pampered; the Jack, who is the life of the party; and the Joker, who comes to the casino for a great time (Kane 2012).

In CY 2014, slot revenues (win) at Foxwoods decreased by 8.9% compared to the previous year. The 2014 calendar year marks the eighth consecutive year of declining slot revenues, since slot revenues peaked in CY 2006. It is estimated that other gaming revenues (tables, poker, and bingo) decreased by 8.9% compared to the previous year. It is estimated that non-gaming revenues declined by 8.9%.

⁴² Kien Haut is owned by the family that controls Genting Berhad Group, which has financed Indian casinos in New York and recently acquired the license to operate VLTs at Aqueduct Racetrack in Queens, New York. It is also providing financial backing to the Mashpee Wampanoag Tribe in its bid to build a casino in Southeastern Massachusetts.

⁴³ A debt restructuring usually involves an agreement by creditors to forgive a portion of the debt and/or a reduction in interest rates.

It is estimated that total revenues (gaming and non-gaming) for Foxwoods decreased by 8.9% over the last year from approximately \$978.8 million in CY 2013 to \$892.1 million in CY 2014 (see Table 5).

Calendar Year 2014 total revenues were \$612.6 million (-40.7%) lower than the casino's 2006 peak revenue year.

Table 5

| Year | Foxwoods Revenues, 2004 to 2014 | | | | |
|-----------------------------|---------------------------------|----------------|------------------|----------------|------------------|
| | Slot Win | Other Gaming | Total Gaming | Non-Gaming | Grand Total |
| 2004 | \$ 805,564,280 | \$ 338,336,999 | \$ 1,143,901,279 | \$ 331,731,371 | \$ 1,475,632,650 |
| 2005 | \$ 815,302,589 | \$ 348,949,508 | \$ 1,164,252,097 | \$ 337,633,108 | \$ 1,501,885,205 |
| 2006 | \$ 816,810,594 | \$ 349,594,934 | \$ 1,166,405,528 | \$ 338,257,603 | \$ 1,504,663,131 |
| 2007 | \$ 783,358,001 | \$ 336,060,582 | \$ 1,119,418,583 | \$ 324,631,389 | \$ 1,444,049,972 |
| 2008 | \$ 736,001,360 | \$ 315,744,583 | \$ 1,051,745,943 | \$ 305,006,323 | \$ 1,356,752,266 |
| 2009 | \$ 684,424,106 | \$ 293,617,941 | \$ 978,042,047 | \$ 283,632,194 | \$ 1,261,674,241 |
| 2010 | \$ 649,020,622 | \$ 272,588,661 | \$ 921,609,283 | \$ 267,266,692 | \$ 1,188,875,975 |
| 2011 | \$ 633,815,234 | \$ 271,906,735 | \$ 905,721,969 | \$ 263,565,093 | \$ 1,169,287,062 |
| 2012 | \$ 576,812,419 | \$ 247,452,528 | \$ 824,264,947 | \$ 239,861,100 | \$ 1,064,126,046 |
| 2013 | \$ 530,572,312 | \$ 227,615,522 | \$ 758,187,834 | \$ 220,632,660 | \$ 978,820,494 |
| 2014 | \$ 483,559,416 | \$ 207,446,989 | \$ 691,006,405 | \$ 201,082,864 | \$ 892,089,269 |
| Annual Change, 2013-2014 | -8.9% | -8.9% | -8.9% | -8.9% | -8.9% |

Source: Connecticut Division of Special Revenue and Pyramid Associates, LLC.

The year-to-year decline in total revenue at Foxwoods Resort Casino is partly due to the lingering effects of the Great Recession, which led to reduced discretionary consumer spending across the retail and service sectors of the economy. However, the patron origin analysis also suggests that Twin River's 2006 expansion successfully diverted significant numbers of Rhode Island and Massachusetts casino patrons away from Foxwoods, while the opening of Empire City Raceway (Yonkers) and Resorts World New York (Queens) had a similar impact on New York visitations to Foxwoods. The opening of Hollywood Casino & Raceway (Bangor) and Oxford Casino have captured casino patrons from Maine and New Hampshire, who previously traveled to Foxwoods.

1.21b Mohegan Sun Casino



Mohegan Sun Casino opened on October 12, 1996 and is now the largest resort casino in the Western Hemisphere based on gaming revenues, or the third largest based on the number of gaming positions. Mohegan Sun operates a 3 million square foot resort and entertainment complex. Mohegan Sun is located on a 240-acre site on the Mohegan Tribe's reservation adjacent to Montville, Connecticut. It overlooks the Thames River and is directly accessible from Interstate 395 and Route 2A. Mohegan Sun has than 352,000 square feet of gaming space in three casinos – the Casino of the Earth (188,000 sq. ft.), the Casino of the Sky (119,000 sq. ft.), and the Casino of the Wind (45,000 sq. ft.).

Mohegan Sun's three casinos have an average of 5,426 slot machines and 320 table games, including roulette, baccarat, black jack, poker, and craps, among others. It also has keno and an 11,000 square foot simulcast race book.

Mohegan Sun has 44 restaurants, cafes, coffee shops, buffets, two multi-station food courts, lounges and bars, and 40 retail and specialty shops. Mohegan Sun also has a 1,200 room luxury hotel with a private high limit table games suite on the 36th floor. The hotel includes 100,000 square feet of convention space and a 20,000 square foot spa. The facility includes a 10,000-seat Arena, a 410-seat lounge, and a 300-seat cabaret. There is also a child care facility and video arcade. It has parking for 13,000 automobiles, valet parking, a parking area for large vehicles

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and tour buses, and a 20-pump gasoline station and convenience center. The facility is open 365 days per year and 24 hours a day.

Mohegan Sun has aggressively expanded its gaming operations in Connecticut and elsewhere. According to official filings with the U.S. Securities and Exchange Commission (2006), Mohegan's "strategy is to profit from expanding demand in the gaming market in our market areas as well as to diversify the Tribe's business interests in the gaming industry outside of Mohegan Sun." Mohegan Sun defines its primary market area as New England and the Mid-Atlantic states.

In January 2003, Mohegan Sun formed a wholly owned subsidiary, the Mohegan Basketball Club LLC, or MBC, for the purpose of owning and operating a professional basketball team in the Women's National Basketball Association, or WNBA. MBC entered into a membership agreement with the WNBA that permits it to operate the Connecticut Sun basketball team. The team plays its home games in the Mohegan Sun Arena.

On January 25, 2005, Mohegan Commercial Ventures PA, LLC acquired all of the partnership interests in Pocono Downs (Pennsylvania) from subsidiaries of Penn National Gaming, Inc. In September 2006, Mohegan was awarded a Category One Slot Machine License and on November 14, 2006, Pocono Downs became the first slot parlor to open its doors in Pennsylvania with approximately 1,100 slot machines. Pocono Downs is currently a 90,000 square foot two-level slot facility. Mohegan invested \$150 million in a Phase II expansion that will brought the facility to 2,500 slot machines and add a variety of new restaurants, retail space, nightlife venues, and parking amenities. The Pocono Downs expansion was completed in the spring of 2008. The facility recently added a 238 guest room hotel.

In November 2006, Mohegan Sun formed a wholly owned subsidiary, Mohegan Golf, LLC to purchase and own the Pautipaug Golf Course in Sprague and Franklin, Connecticut. In May 2007, Mohegan Golf acquired most of the assets of Pautipaug Country Club Inc. and renamed it Mohegan Sun Country Club at Pautipaug. The new golf facility opened in June 2007.

Mohegan Sun also has on-going partnership ventures with the Cowlitz Tribe in Clark County, Washington and the Menominee Indian Tribe of Wisconsin to develop casinos in those jurisdictions.

On November 16, 2006, Mohegan Sun announced a \$925 million "Project Horizon" expansion, which was to add a second 1,000-room luxury hotel and 42,000 feet of gaming space to the existing facility. However, on September 21, 2008, Mitchell Etes, then President and CEO of Mohegan Sun announced that the casino was suspending construction of the planned 39-story hotel, the House of Blues music hall, the spa, and the additional retail and restaurant space.⁴⁴ Etes observed that the suspension of Project Horizon was "due to uncertainty in the economy and its impact on the region's gaming market." Etes stressed that it is a "suspension and not a termination," because the "casino continues to believe in the long-term prospects for the business and the region." Indeed, in August of 2008, a new 42,000 square foot Casino of the Wind opened with 900 additional slot machines, 10 table games, a poker room with 45 tables, a 15,000-square-foot multi-level, high-energy, branded restaurant/bar, a 2,700-square-foot retail outlet, and a 4,000-square-foot quick-serve dining outlet. Nevertheless, on September 13, 2010, MTGA executives indicated that the casino would only construct a second hotel if it was built and owned by a third party, but under Mohegan Sun management (Mosher 2010).

After reporting a net loss of \$26.3 million for the quarter ending September 30, 2010, the Mohegan Tribal Gaming Authority (MTGA) announced on November 12, 2010, that it had hired Blackstone Advisory Partners to assist it with strategic planning and analysis, including operational improvements, hotel projects, and bank and bond maturities. MTGA has a \$675 million revolving bank loan and \$250 million in senior subordinated notes due in the first half of 2012. As with Foxwoods, Standard & Poor's lowered its bond rating for the MTGA on November 24,

⁴⁴ Associated Press, "Mohegan Sun Delaying Expansion Plans," see, <http://www.fox61.com/pages/landing/?Mohegan-Sun-delaying-expansion-plans=1&blockID=65412&feedID=341>

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2010, from B to CCC. On November 30, 2010, Moody's Investor Service also downgraded its bond rating on the MTGA from B3 to Caa2, which moves its bonds into the high risk category.

However, in contrast to Foxwoods, Leo Chupaska, the MTGA's chief financial officer, states that the authority is in a "refinancing mode," rather than a restructuring mode (quoted in Hallenbeck 2010).⁴⁵ The MTGA has moved to reduce operating expenses first with wage freezes, workforce reductions through attrition, and finally layoffs in September 2010. The MTGA has also closed its Sunburst buffet and a snack shop in its race book, while two other restaurants were shifted to third party management (Mosher 2010).

On March 6, 2012, MTGA announced that it had successfully refinanced \$1.6 billion in debt, including \$961.8 million in outstanding bonds and a \$675 million revolving bank loan. The bond indebtedness, some of which was due later in 2012, was spread out over five bond issues due in 2012, 2013, 2014, 2015, and 2017 with interest rates on the new issues ranging from 6.3 percent to 11.5 percent. Bank lenders reworked the \$675 revolving bank loan into three separate loans totaling \$700 million. Mohegan CEO Mitchell Etes stated that "with this long-term capital solution in place, we are now well positioned to continue the development and expansion of the Mohegan Sun brand" (quoted in *Hartford Courant*, March 7, 2012).

Table 6

| Mohegan Sun Revenues, 2004 to 2012 | | | | | |
|------------------------------------|----------------|----------------|------------------|----------------|------------------|
| Year | Slot Win | Other Gaming | Total Gaming | Non-Gaming | Grand Total |
| 2004 | \$ 840,025,608 | \$ 352,810,757 | \$ 1,192,836,365 | \$ 119,283,637 | \$ 1,312,120,002 |
| 2005 | \$ 868,774,303 | \$ 337,084,430 | \$ 1,205,858,733 | \$ 211,025,278 | \$ 1,416,884,011 |
| 2006 | \$ 917,665,730 | \$ 384,501,941 | \$ 1,302,167,671 | \$ 272,153,043 | \$ 1,574,320,714 |
| 2007 | \$ 901,151,565 | \$ 356,856,020 | \$ 1,258,007,585 | \$ 264,181,593 | \$ 1,522,189,178 |
| 2008 | \$ 842,873,026 | \$ 367,492,639 | \$ 1,210,365,665 | \$ 282,015,200 | \$ 1,492,380,865 |
| 2009 | \$ 763,879,790 | \$ 322,357,271 | \$ 1,086,237,061 | \$ 235,713,442 | \$ 1,321,950,503 |
| 2010 | \$ 736,157,953 | \$ 291,518,549 | \$ 1,027,676,502 | \$ 227,116,507 | \$ 1,254,793,009 |
| 2011 | \$ 710,893,823 | \$ 306,395,238 | \$ 1,017,289,061 | \$ 208,544,257 | \$ 1,225,833,318 |
| 2012 | \$ 652,780,377 | \$ 291,792,829 | \$ 944,573,206 | \$ 205,916,959 | \$ 1,150,490,165 |
| 2013 | \$ 614,364,394 | \$ 274,620,884 | \$ 888,985,278 | \$ 193,798,791 | \$ 1,082,784,069 |
| 2014 | \$ 583,912,203 | \$ 261,008,755 | \$ 844,920,958 | \$ 184,192,769 | \$ 1,029,113,727 |
| Annual Change, 2013- | | | | | |
| 2014 | -5.0% | -5.0% | -5.0% | -5.0% | -6.1% |

Source: Connecticut Division of Special Revenue; U.S. Securities & Exchange Commission; Pyramid Associates, LLC.

In CY 2014, slot revenues (win) decreased by 5.0% compared to the previous year. The 2014 calendar year marks the eighth consecutive year of declining slot revenues, since slot revenues peaked in CY 2006. It is estimated that table games revenues declined by 5.0% during the calendar year, while total gaming revenues decreased by 5.0% (see Table 6).

Calendar Year 2012 total revenues were \$545.2 million lower (-34.6%) than the casino's 2006 peak revenue year.

The year-to-year (-5.0%) and long-term (-34.6%) decline in total revenue at Mohegan Sun is attributable to the same factors that have affected Foxwoods and the resort casino sector generally – the lingering effects of the Great Recession and increased competition in the Northeast, particularly from Rhode Island, Maine, and New York gaming venues.

⁴⁵ Debt refinancing typically involves an agreement by creditors to lower interest rates and/or extend maturities on existing debt without a reduction in outstanding debt.

1.22 RHODE ISLAND

Twin River Casino and Newport Grand Slots were originally licensed as pari-mutuel facilities with Twin River offering live greyhound racing and Newport Grand offering jai alai. Both facilities were authorized to operate video lottery terminals (VLTs) in 1992. In calendar year 2014, Rhode Island's two slot parlors had combined gross gaming revenues (net terminal income + table games) of \$593.6 million, employed approximately 1,355 people, and paid \$329.0 million to the Rhode Island general treasury.⁴⁶

1.22a Twin River



The former Lincoln Greyhound Park was rebranded Twin River on March 23, 2007 and is located in Lincoln, Rhode Island off Route 146, approximately 10 minutes north of Providence. In 2007, Twin River completed a \$220 million expansion, which brought its total gaming space to 300,000 square feet. It is now the sixth largest gaming facility in the United States in terms of slot positions, with an average of 4,537 video lottery terminals (VLTs). The Twin River expansion in 2007 also added several new gourmet and family restaurants, a bar and lounge, a comedy club, a 2,000-seat entertainment arena.

According to Twin River officials, the improvement, expansion, and re-branding of the former Lincoln Park was designed to extend its market gravity from a 30 mile radius to a 60 mile radius, which would allow it to draw larger numbers of patrons from the Worcester and Boston markets (Associated Press 2007; Mayerowitz 2007). While previous patron origins analyses suggest that this strategy has been successful, it also found signs that one element of Twin River's 2007 success story was its cannibalization of the Newport Grand slot parlor in Newport, Rhode Island. This year's patron origin analysis again confirms that any "gravity effect" from the 2007 expansion was fully realized in 2007 and early 2008. Twin River has partially stemmed the flow of gamblers from Rhode Island to Connecticut, but it remains primarily a convenience gambling facility that attracts local gamblers from Rhode Island, southeastern Massachusetts, and central Massachusetts. Twin River no longer offers live greyhound racing.

In early March of 2008, Twin River's owner, UTGR, Inc. missed a loan payment on outstanding loans tied to Twin River's expansion and renovation.⁴⁷ UTGR, Inc. spent most of 2008 operating under a forbearance agreement with its chief lender, Merrill Lynch Capital Corporation that delayed legal action on \$577 million in outstanding loans tied to Twin River's purchase, renovation, and operation (Public Gaming International 2008). The forbearance agreement initially had a June 30 expiration date, with options for two additional 30-day extensions. The agreement was extended several times during 2008, but on January 30, 2009, Merrill Lynch spokesman Bill Halldin announced that on January 31, 2009 would have been the expiration date on UTGR's last forbearance agreement "had certain milestones been reached, but the agreement actually expired on January 5" (quoted in Gregg 2009a).

On June 23, 2009, UTGR, Inc. filed for Chapter 11 bankruptcy. The filing stated that "As successful as [Twin River's] operations have been, their revenues cannot support the substantial demands imposed by the state tax rate and the debtor" debt services obligations" on \$589 million in loans." The consensual agreement with Twin River's

⁴⁶ Technically, Twin River and Newport Grand Slots do not actually pay gaming taxes, but receive a share of VLT revenues (29% combined) in exchange for allowing the state to place VLTs at their facilities. The state also shares revenues (10%) with a technology and communications provider (G-Tech) and keeps approximately 61% of VLT revenues for the general treasury. A similar arrangement is employed by the states of Delaware, New York, and West Virginia.

⁴⁷ UTGR, Inc. was a subsidiary of BLB Investors, LLC, which was established to operate Twin River. BLB Investors is owned jointly by Kerzner International Ltd., Starwood Capital Group, and the Waterford Group.

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investors, led by Merrill Lynch Capital, wrote off \$290 million in debt owed to the investors, and eliminated \$153 million in owner equity. The agreement also called on the state to allow 24 hour gambling 365 days per year at the facility and asked the state to terminate a requirement that the facility offer live dog racing, because live racing was costing approximately \$10 million more per year to operate than it generated in revenue. The slot parlor also asked the state to reduce its share of net terminal income or to reimburse the facility for up to \$20 million annually in marketing costs. The lenders were authorized to immediately begin the process of identifying a new operator to manage the facility (Gregg 2009b).

The state responded on May 15, 2010, with Governor Donald Carcieri signing a law that ended live greyhound racing at Twin River and, thereby, reducing the facility's operating costs by \$10 million per year. Shortly thereafter, on June 24, 2010, a federal bankruptcy judge approved a reorganization plan, which cleared the way for a lenders group led by Bank of America (owner of Merrill Lynch), and including Wells Fargo/Wachovia, and Sankaty Advisors, LLC, to take formal control of the bankrupt slot parlor, push aside BLB Investors, and appoint a new board of directors (Grimaldi 2010a).⁴⁸ Subsequent legislation authorized the facility to operate 24 hours per day, 365 days per year (Gregg 2010) and committed the state to provide \$3.6 million in new marketing subsidies to Twin River (Grimaldi 2010b).

Finally, on November 9, 2010, the Rhode Island Lottery approved transferring the licenses required to operate Twin River to the lenders group, which immediately announced that they had received the final regulatory approval required to end the company's 17-month bankruptcy case, which was approved by the U.S. Bankruptcy Court on the same date (Grimaldi 2010b). John E. Taylor, Jr., Chairman of the new board of directors, stated that UTGR's debt load on the property had been reduced to \$300 million from \$598 million. However, Taylor warned that "Massachusetts is poised to allow full gaming at some point in the near future, and given that nearly half of our customer base is from the Commonwealth, we must act quickly to address that very real threat" (quoted in Donoghue 2010).

Furthermore, after months of speculation, it was revealed on December 21, 2010 that Apollo Global Management, the owner of Caesars Entertainment, Inc. (formerly Harrah's Entertainment, Inc.) had proposed acquiring, and eventually did acquire, more than a 5 percent stake in Twin River (Grimaldi 2010c). On March 4, 2011, Jan Jones, Senior Vice-President for Government Relations and Communications at Caesar's, reaffirmed the company's interest in helping "Rhode Island move their casino gambling forward," although she cautioned that such efforts depended on Rhode Island's ability to quickly "position itself to be competitive with Massachusetts" (quoted in Gregg 2011).

In the meantime, Twin River's current owners launched a public campaign to offer table games, although such a move required statewide and local voter approval. The Rhode Island General Assembly authorized a statewide and local referendum on table games for November 6, 2012, which passed in Lincoln, but not Newport, Rhode Island. Twin River began offering live table games on June 19, 2013. It currently has 80 live table games, including blackjack (48 tables), roulette (6 tables), baccarat (6 tables), three card poker (6 tables), craps (4 tables), Spanish 21 (4 tables), Let It Ride (3 tables), pai gow poker (2 tables) and Big Six 'Money' Wheel (1 table). The Rhode Island General Assembly is currently considering a bill that would allow Twin River to add a 200-room hotel (Bogdan 2015).

Notwithstanding its much publicized problems with lenders and creditors, Twin River's 2007 expansion positioned it to withstand the Great Recession better than many resort casinos throughout the country, and it continued to improve its restaurant offerings during its 17-month bankruptcy. In addition, higher gasoline prices and the recessionary trend toward "stay-cations" have allowed Twin River to divert additional slot machine players from Foxwoods and Mohegan Sun. Consequently, Twin River has continued to show year-to-year increases in net terminal income, although revenue growth slowed temporarily during the trough of the Great Recession, and its table games have performed above expectations.

⁴⁸ Sankaty Advisors, LLC is an affiliate of Massachusetts-based Bain Capital Investment Group.

Table 7

| Twin River Casino Revenues, 2004 to 2014 | | | | | | |
|--|---------------------|-------------|---------------|----------------|---------------|----------------|
| Year | Net Terminal Income | | Other Gaming | Total Gaming | Non-Gaming | Grand Total |
| 2004 | \$ | 304,772,574 | \$ - | \$ 304,772,574 | \$ 26,393,458 | \$ 331,166,032 |
| 2005 | \$ | 332,901,554 | \$ - | \$ 332,901,554 | \$ 29,319,305 | \$ 362,220,859 |
| 2006 | \$ | 329,364,358 | \$ - | \$ 329,364,358 | \$ 29,642,792 | \$ 359,007,150 |
| 2007 | \$ | 375,291,175 | \$ - | \$ 375,291,175 | \$ 45,034,941 | \$ 420,326,116 |
| 2008 | \$ | 407,498,600 | \$ - | \$ 407,498,600 | \$ 40,342,361 | \$ 447,840,961 |
| 2009 | \$ | 399,662,954 | \$ - | \$ 399,662,954 | \$ 35,570,003 | \$ 435,232,957 |
| 2010 | \$ | 423,752,160 | \$ - | \$ 423,752,160 | \$ 42,798,968 | \$ 466,551,128 |
| 2011 | \$ | 462,793,306 | \$ - | \$ 462,793,306 | \$ 46,742,124 | \$ 509,535,430 |
| 2012 | \$ | 478,231,587 | \$ - | \$ 478,231,587 | \$ 48,779,622 | \$ 527,011,209 |
| 2013 | \$ | 470,391,973 | \$ 33,884,358 | \$ 504,276,331 | \$ 49,923,357 | \$ 554,199,688 |
| 2014 | \$ | 466,015,784 | \$ 82,419,476 | \$ 548,435,260 | \$ 54,295,091 | \$ 602,730,351 |
| Annual Change, 2013-2014 | | -0.9% | 143.2% | 8.8% | 8.8% | 8.8% |

Source: Rhode Island Lottery Commission & Pyramid Associates, LLC.

It is estimated that 2014 net terminal income for Twin River Casino was \$466.0 million, compared to \$470.4 million in CY 2013, for a year-to-year decrease of -0.9%. Table game revenue for Twin River Casino was \$82.4 million in CY 2014, compared to \$33.9 million in CY 2013, for a year-to-year increase of 143.2%.

Calendar Year 2014 total revenue for Twin River Casino was \$602.7 million, which is \$243.7 million (+67.9%) higher than its total revenue in 2006 -- the New England casino industry's peak revenue year.

1.22b Newport Grand Slots



Newport Grand Slots is located in Newport, Rhode Island on Route 138 at the far south end of Aquidneck Island. The facility no longer offers live jai-alai, but simulcasts jai-alai games year-round from Dania and Miami, Florida. Newport Grand also offers thoroughbred, harness, and greyhound simulcasts every day except Tuesday in its new simulcast theater. Newport Grand has an average of 1,097 video lottery terminals, a restaurant, and Club Royale (a restaurant with live entertainment and dancing).⁴⁹ The facility is open 365 days per year from 10:00 am to 1:00 am on weekdays and Sundays and from 10:00 am to 2:00 am on Fridays and Saturdays.

In 2005, Newport Grand reached an agreement with the State of Rhode Island that authorized the facility to increase the number of VLTs from 1,070 to 2,101 in exchange for the owners' commitment to expand the facility, although the actual number of VLTs on site peaked at 1,530 in February 2009. A proposed \$20 million expansion, including a new 99-room stand-alone hotel has failed to materialize as revenues continue to decline on a year-to-year basis. However, on September 24, 2008, Newport Grand Slots did complete a multi-million dollar transformation of its former jai alai fronton into 22,000 square-feet of non-smoking gaming space, which included new VLTs, virtual blackjack tables, two new food and beverage outlets, enhanced security operations, and back of house functions. The Rhode Island General Assembly authorized a statewide and local referendum on table games for November 6, 2012, but Newport voters rejected the bid to allow table games at the facility.

⁴⁹ This figure is the annual average number of VLTs for CY 2014.

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It is estimated that total annual revenues for Newport Grand Slots (excluding simulcasts) were approximately \$49.2 million in CY 2014, compared to \$50.5 million in CY 2013 (-2.5%), which marks the ninth year out of the last ten years that Newport Grand has recorded a year-to-year revenue decline (see Table 8).

CY 2014 net terminal income (gross gaming revenues) was \$45.2 million (-2.5%), compared to \$46.4 million CY 2013 (see Table 8).

Table 8

| Newport Grand Revenues, 2004 to 2014 | | | | |
|--------------------------------------|---------------|-------|------------|---------------|
| Year | Net Terminal | | Non-Gaming | Grand Total |
| | Income | | | |
| 2004 | \$ 79,056,187 | \$ | 7,723,878 | \$ 86,780,065 |
| 2005 | \$ 78,011,743 | \$ | 7,341,217 | \$ 85,352,960 |
| 2006 | \$ 77,139,657 | \$ | 6,942,569 | \$ 84,082,226 |
| 2007 | \$ 72,706,499 | \$ | 7,197,943 | \$ 79,904,442 |
| 2008 | \$ 67,541,838 | \$ | 6,686,642 | \$ 74,228,480 |
| 2009 | \$ 61,505,924 | \$ | 5,474,027 | \$ 66,979,951 |
| 2010 | \$ 53,297,539 | \$ | 4,796,779 | \$ 58,094,318 |
| 2011 | \$ 50,005,566 | \$ | 4,500,501 | \$ 54,506,067 |
| 2012 | \$ 50,131,053 | \$ | 4,511,795 | \$ 54,642,848 |
| 2013 | \$ 46,350,351 | \$ | 4,171,532 | \$ 50,521,883 |
| 2014 | \$ 45,179,615 | \$ | 4,066,165 | \$ 49,245,780 |
| Annual Change, 2013-2014 | | -2.5% | -2.5% | -2.5% |

Source: Rhode Island Lottery Commission & Pyramid Associates, LLC.

Calendar Year 2014 total revenue was \$32.2 million lower (-37.1%) than its total revenue in 2006 -- the New England casino industry's peak revenue year (see Table 8).

1.23 MAINE

On May 6, 2004, the Pine Tree State became the third state in New England – after Rhode Island (1992) and Connecticut (1992) – to authorize expanded gambling in the form of slot machines. The “Governor’s Gambling Control Legislation” was enacted by the Maine State Legislature and signed into law by Governor John E. Baldacci six months after Maine’s voters approved a referendum by 53% to 47% to allow slot machines at the Bangor harness racetrack. The enabling legislation (P.L. 2003, Title 8, Chapter 31) adopted pursuant to the binding referendum established a 5-member Gambling Control Board (GCB) to oversee operations at the new racino, which opened on November 4, 2005 near Bangor Historic Racetrack and Bass Park on Main Street in Bangor, Maine.⁵⁰ Maine’s voters narrowly approved a casino for Oxford, Maine in a statewide referendum on November 2, 2010. Oxford Casino became the Pine State’s second Class III gaming venue when it opened on June 5, 2012.

In calendar year 2014, Maine’s two casinos had combined gross gaming revenue of \$127.3 million, employed approximately 879 people, and paid \$42.1 million to the Maine general treasury.

⁵⁰ The Maine Gambling Control Board is appointed by the Governor and confirmed by the Senate. The GCB and its staff are located within the Maine Department of Public Safety, 45 Commerce Drive, Augusta, Maine 04330. See, “Gambling Control Board,” at <http://www.state.me.us/dps/GambBoard/>, <http://janus.state.me.us/legis/statutes/8/title8ch0sec0.html> for the enabling legislation.

1.22a Hollywood Casino Bangor



Hollywood Casino & Raceway Bangor, which is owned and operated by Penn National Gaming, Inc., operates a full-fledged casino with 877 slot machines and 16 table games. Construction of the facility was started in the summer of 2007 and was completed in July of 2008 (Gagnon 2007b). Penn National originally planned to construct a \$90 million slots facility on its 8-acre site, but on February 8, 2007, the company announced plans for a \$131 million upscale

racino that would include a hotel and additional dining outlets.⁵¹ Penn National Chairman and CEO Peter Carlino announced that the company accelerated its plans for Hollywood Slots because of “the impressive results being generated by our temporary facility [on Main Street] and a substantial number of patrons driving significant distances to Hollywood Slots at Bangor.”⁵²

The new facility features a two-story, semicircular, glass tower gaming area, a seven-story 152-room hotel, a four-story parking garage, restaurants, retail space and a new simulcast facility for off-track wagering. Hollywood Slots’ state gaming license allows it to operate up to 1,500 slot machines. It was designed to accommodate up to the authorized 1,500 slot machines, but much of that space has since been allotted to table games. On November 8, 2011, the residents of Penobscot County voted to authorize table games at the former Hollywoods Slots and Raceway. On March 16, 2012, the renamed Hollywood Casino Bangor opened its first table games, which include six black jack tables, a roulette wheel, and seven poker tables. The Maine Gambling Control Board unanimously approved the new offerings and the name change on March 27, 2012, to make the former racetrack casino the state’s first full-fledged casino.

It is estimated that slot revenue for Hollywood Casino Bangor was \$46.4 million in CY 2014 (-1.8%), compared to \$47.3 million in CY 2013 (See Table 9). Hollywood Casino Bangor has seen two consecutive years decreasing slot machine revenue, primarily due to new competition from Oxford Casino in Oxford, Maine (see below), but also due to “internal cannibalization” resulting from the introduction of table games.⁵³ Table games revenue in CY 2014 was \$8.0 million (+8.6%), compared to \$7.4 million in CY 2013. Total gaming revenue to \$54.4 million CY 2014 (-0.4%), compared to \$54.7 million in CY 2013 (see Table 9).

⁵¹ The upscale racino -- a racino with a moderate-sized hotel, a small number of dining and entertainment venues, and other amenities (e.g., retail) was pioneered by Dover Downs in Delaware, which now has 2,700 slot machines, a 232-room hotel with 25,000 square feet of meeting space, gourmet dining and entertainment venues. It also sponsors various sporting events (e.g., boxing). Twin River in Rhode Island has been moving toward this model since 2007.

⁵² Gagnon (2007a). A recent study by Todd Gabe, a University of Maine professor, estimates that Hollywood Slots has generated an additional \$20 million in indirect (off-site) spending by casino patrons from November 2005 to March 2007: \$14 million at local restaurants and \$6 million at local hotels (Dolloff 2007).

⁵³ The same type of internal cannibalization occurred at Twin River in Lincoln, Rhode Island following the introduction of table games.

Table 9

| Hollywood Casino Bangor Revenues, 2005 to 2014 | | | | | |
|--|----------------------|--------------|---------------|--------------------|---------------|
| Year | Gross Gaming Revenue | | Total Gaming | Non-Gaming Revenue | Total Revenue |
| 2005 | \$ 4,155,653 | - | \$ 4,155,653 | N/A | \$ 4,155,653 |
| 2006 | \$ 37,521,884 | - | \$ 37,521,884 | \$ 1,125,657 | \$ 38,647,541 |
| 2007 | \$ 43,251,970 | - | \$ 43,251,970 | \$ 3,200,646 | \$ 46,452,616 |
| 2008 | \$ 50,515,382 | - | \$ 50,515,382 | \$ 4,243,292 | \$ 54,758,674 |
| 2009 | \$ 59,198,222 | - | \$ 59,198,222 | \$ 5,268,642 | \$ 64,466,864 |
| 2010 | \$ 61,667,214 | - | \$ 61,667,214 | \$ 6,228,389 | \$ 67,895,603 |
| 2011 | \$ 59,453,078 | - | \$ 59,453,078 | \$ 6,004,761 | \$ 65,457,839 |
| 2012 | \$ 56,212,926 | \$ 6,470,964 | \$ 62,683,890 | \$ 6,331,073 | \$ 69,014,963 |
| 2013 | \$ 47,269,709 | \$ 7,388,848 | \$ 54,658,557 | \$ 5,520,514 | \$ 60,179,071 |
| 2014 | \$ 46,410,579 | \$ 8,026,814 | \$ 54,437,393 | \$ 5,498,177 | \$ 59,935,570 |
| Annual Change, 11-12 | -1.8% | 8.6% | -0.4% | -0.4% | -0.4% |

Source: Maine Gambling Control Board & Pyramid Associates, LLC.

Calendar Year 2014 total revenue (gaming and non-gaming) was \$21.3 million (+55.1%) higher than during the New England casino industry’s 2006 peak revenue year (see Table 9).

1.22b Oxford Casino



Maine’s voters narrowly approved a casino for Oxford, Maine in a statewide referendum on November 2, 2010. Oxford Casino became the Pine State’s second Class III gaming venue when it opened on June 5, 2012 with 500 slot machines, 12 table games, a restaurant, and bar. The casino expanded its offering in September 2012 to include 812 slot machines and 26 table games. On March 29, 2013, it was announced that Oxford Casino was being sold to Churchill Downs for \$160 million in cash (Skelton and Dixon 2013).

It is estimated that slot revenue for Oxford Casino was \$58.4 million in CY 2014 (+0.0%), compared to \$58.4 million in CY 2013 (See Table 10). Table games revenue in CY 2014 was \$14.5 million (+9.1%), compared to \$13.3 million in CY 2013. Total gaming revenue to \$72.8 million CY 2014 (+1.7), compared to \$71.6 million in CY 2013 (see Table 10).

Table 10

| Oxford Casino Revenues, 2012 to 2014 | | | | | |
|--------------------------------------|----------------------|---------------|---------------|--------------------|---------------|
| Year | Slot Machine Revenue | Other Gaming | Total Gaming | Non-Gaming Revenue | Total Revenue |
| 2012 | \$ 29,887,262 | \$ 6,652,279 | \$ 36,539,541 | \$ 1,680,819 | \$ 38,220,360 |
| 2013 | \$ 58,353,948 | \$ 13,261,868 | \$ 71,615,816 | \$ 3,294,328 | \$ 74,910,144 |
| 2014 | \$ 58,368,047 | \$ 14,464,188 | \$ 72,832,235 | \$ 3,350,283 | \$ 76,182,518 |
| Annual Change, 2013-2014 | 0.0% | 9.1% | 1.7% | 1.7% | 1.7% |

Source: Maine Gambling Control Board & Pyramid Associates, LLC.

2.00 ORIGINS OF NEW ENGLAND CASINO PATRONS

2.10 METHODOLOGY

The patron origin analysis was conducted on five different days: Thursday, February 12, 2015 from 9:00 am through Monday, February 15, 2015 to midnight.⁵⁴ This time frame includes one holiday (President's Day), two weekdays (Thursday and Friday), and two days of the weekend (Saturday and Sunday). Sample counts of at least 1,500 automobile license plates were taken each day during the five-day observation period at Foxwoods, Mohegan Sun, and Twin River, while sample counts of at least 200 automobile license plates were taken each day at Newport Grand Slots, Hollywood Casino, and Oxford Casino. This sample was distributed across the day by counting license plates at each of the facilities during each of four periods on each day as defined below:

- Sample 1: Morning (between 9:00 am and 11:00 am)
- Sample 2: Afternoon (between 2:00 pm and 4:00 pm)
- Sample 3: Evening (between 7:00 pm and 9:00 pm)
- Sample 4: Late Night (between 12:00 am and 2:00 am)

In calculating annual estimates of the percentage of Foxwoods', Mohegan's, Twin River's, Newport's, Hollywood's and Oxford's patrons that originate in various states, it is assumed that traffic flows and patron origins are constant, on average, on similar types of days and during similar times of the day.⁵⁵ Thus, sampling counts are extrapolated on a daily basis for each day of the week during a 365-day year.⁵⁶ Weekdays are defined as Monday, Tuesday, Wednesday, Thursday, and Friday. Weekend days are defined as Saturday and Sunday. Holidays are defined as New Year's Day, Martin Luther King, Jr. Day, President's Day, Patriot's Day (Massachusetts state holiday), Easter, Memorial Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, and Christmas Day. The purpose of the automobile and bus count was to derive an estimate of the percentage of private automobiles and tour buses originating in Massachusetts, Rhode Island, Connecticut, Vermont, New Hampshire, Maine, New York, and New Jersey. Vehicles from other states and Canada are classified as Other. It is assumed that all vehicles originate in their state of registration as determined by license plate identifications.⁵⁷

⁵⁴ The methodology employed in the patron origin analysis has been validated by academic peer review and published by Jeffrey Dense and Clyde W. Barrow, "Estimating Casino Expenditures by Out of State Patrons: Native American Gaming in Connecticut," *Journal of Travel Research* (May 2003): 410-15. See also, Clyde W. Barrow and David R. Borges, "New England Casino Gaming Update: Patron Origin Analysis and a Critique of its Critics," *Gaming Law Review and Economics*, Vol. 14, No. 3 (2010): 175-86. Findings generated by this methodology have been cited as authoritative by regional economists at the University of Connecticut, see, Arthur W. Wright, "As the Wheel of Fortune Turns: Casinos Revisited," *The Connecticut Economy: A University of Connecticut Quarterly Review* (September 2006): 8-11, research economists at the Federal Reserve Bank of Boston, see, Heather Brome, "Memorandum on Economic Impact of Casino Development," (September 14, 2006), at <http://www.bos.frb.org/economic/neppc/memos/2006/brome091406.pdf>, the Connecticut Economic Resource Center (Marsden 2007), and by the international accounting firm UHY Advisors, *Casino Gaming in Massachusetts: An Economic, Fiscal, and Social Analysis* (Boston: Greater Boston Chamber of Commerce, 2008). These estimates are also consistent with public statements by Foxwoods and Mohegan Sun officials (e.g., *Boston Globe*, October 21, 1995; *New London Day*, March 28, 2004; *New York Times*, October 21, 2007). The University of Connecticut Center for Economic Analysis also conducted a patron intercept survey at Foxwoods from September 7 to 13, 1999 with 496 respondents, see, Fred Carstensen, William Lott, Stan McMillen, Bobur Alimov, Na Li Dawson, and Tapas Ray, *The Economic Impact of the Mashantucket Pequot Tribal Nation Operations in Connecticut* (Storrs, CT: University of Connecticut Center for Economic Analysis, 2000). The UCCEA survey found that 33% of Foxwoods patrons lived in Massachusetts, 27.5% in Connecticut, 17.2% in Rhode Island, 2.6% in New Hampshire, 1.8% in Maine, 0.8% in Vermont, 9.2% in New York, and 2.0% in New Jersey, and 5.5% in other states. The reliability of the findings is bolstered by the fact that three different survey methodologies have arrived at almost identical results.

⁵⁵ A similar patron origin analysis of Foxwoods was conducted by the Center for Policy Analysis in 1995. A second analysis was conducted of Foxwoods and Mohegan in 1999, followed by a third count in 2004, a fourth count in 2006, and a fifth count in 2008. A comparison of results across the five surveys for similar types of days and similar times of day indicate that this assumption is methodologically reliable and empirically correct.

⁵⁶ The years 2004, 2008, and 2012 are leap years so the calculations for this analysis used a 366-day year.

⁵⁷ It is likely that some automobiles are rented by out-of-state or foreign visitors, while some visitors arriving by tour bus are also not from the vehicle's state of origin. It is estimated that about 3% of total visitations to Foxwoods and Mohegan come from outside the Northeast, but arrive with New England license plates. This does not pose a methodological problem, because the purpose of a patron origin analysis is to identify the revenue leaving a particular state (regardless of citizenship) that could be captured or recaptured if a comparable facility is constructed in that state. The Mohegan Tribal Gaming Authority (2008, 37) reports that "primarily all Mohegan Sun...patrons arrive via

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The Project researchers also estimated the percentage of tour buses originating in the states of Massachusetts, Rhode Island, Connecticut, Vermont, New Hampshire, Maine, New York, and New Jersey. Tour buses from other states and Canada were classified as "Other. Because the majority of buses remain in the lots for an extended period of time, sample counts of the tour buses were taken on a less frequent basis to avoid double counting. One count per day was taken of the tour buses at Foxwoods and Mohegan Sun. It is assumed that all buses originate in their state of registration as determined by license plate identifications.

Using the patron origin methodology, research staff from the Northeastern Gaming Research Project surveyed 8,443 private automobiles and 146 tour buses at Foxwoods; a sampling of 8,436 private automobiles and 150 tour buses at Mohegan Sun; 18,028 private automobiles at Twin River; 3,743 private automobiles at Newport Grand Slots; 7,100 private automobiles at Hollywood Casino Bangor; and 5,998 private automobiles at Oxford Casino. Based on these samples, it is estimated that 88 percent of Foxwoods' and Mohegan Sun's visitors arrive by private automobile, while the remaining 12 percent arrive by tour bus. The un-weighted percentages for patron origins by day are weighted to account for the type of transportation and the type of day using the following formula:

$$\begin{aligned}\text{Adjusted State Percentage for Weekdays} &= [(\text{Car Weekday Percentage} * .667) * .88] \\ &\quad + [(\text{Bus Weekday Percentage} * .667) * .12] \\ \text{Adjusted State Percentage for Weekends} &= [(\text{Car Weekend Percentage} * .303) * .88] \\ &\quad + [(\text{Bus Weekday Percentage} * .303) * .12] \\ \text{Adjusted State Percentage for Holidays} &= [(\text{Car Weekday Percentage} * .030) * .88] \\ &\quad + [(\text{Bus Weekday Percentage} * .030) * .12]^{58}\end{aligned}$$

The weighted estimates for private automobiles and tour buses were then translated from percentages of vehicles to percentages of patrons based on field observations and public statements by casino executives that visitations during weekends and holidays are approximately double the average daily traffic.⁵⁹ Thus, the weighted estimates for private automobiles and tour buses are translated into percentages of patrons using the formula:

$$\text{Percent Patrons} = [(\text{Weekend\%} * 2) + (\text{Holiday\%} * 2)] + [\text{Weekday\%/2}]$$

automobile and are assumed to work or live in the northeastern United States.”

⁵⁸ The adjustment factors of .667, .303, and .030 are the percentage of weekdays, weekend days, and holidays, respectively, in the 2008 calendar year based on the definitions in the methodology. The adjustment factors of .88 and .12 are the estimated percentage of patrons that arrive by car and bus.

⁵⁹ This observation is confirmed by statements from both Foxwoods and Mohegan Sun officials, see, Florin (2004a), who notes that “the two casinos are busiest on weekends, though they both make extensive efforts to lure customers during the week.”

2.20 FINDINGS

The total weighted estimates of patron origins, including both types of transportation, indicate that casino patrons originate from the following states (see Table 11):

Table 11
Estimated Patron Origins by State, 2015:
Foxwoods, Mohegan Sun, Twin River, Newport Grand, Hollywood, & Oxford

| | Foxwoods | Mohegan | Twin River | Newport | Hollywood | Oxford |
|---------------|----------|---------|------------|---------|-----------|--------|
| Massachusetts | 32.2% | 18.3% | 51.9% | 44.1% | 2.0% | 2.0% |
| Connecticut | 39.8% | 59.9% | 0.9% | 0.8% | 0.1% | 0.0% |
| Rhode Island | 11.0% | 3.4% | 45.1% | 52.1% | 0.1% | 0.1% |
| New Hampshire | 2.6% | 1.1% | 0.5% | 0.2% | 2.0% | 9.9% |
| Maine | 1.2% | 0.3% | 0.1% | 0.0% | 87.8% | 86.2% |
| Vermont | 0.5% | 0.4% | 0.0% | 0.0% | 0.3% | 0.5% |
| New York | 9.3% | 12.7% | 0.3% | 0.5% | 0.3% | 0.2% |
| New Jersey | 1.7% | 1.4% | 0.2% | 0.1% | 0.5% | 0.0% |
| Other | 1.7% | 2.5% | 1.0% | 2.2% | 6.9% | 1.1% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: Pyramid Associates, LLC. **Note:** The statistical margin of error for the Foxwoods, Mohegan Sun, Twin River, Newport, Hollywood, and Oxford surveys is +/- < 1%.

The results for Foxwoods and Mohegan Sun are consistent with earlier patron origin analyses by the Northeastern Gaming Research Project, which used the same methodology to estimate patron origins in 1995, 1999, 2004, 2006, 2008, 2009, 2010, 2011, 2012, and 2013 (see Table 12 and Table 13).⁶⁰ The geographic structure of New England’s casino gaming market has shifted over the last 16 years due to increased competition from new gaming facilities in Maine, Pennsylvania, and New York, as well as improvements to Twin River in Rhode Island. The most significant changes in patron origin ratios for the Connecticut casinos have been the declining ratio of visits from residents of Maine, Massachusetts, New Jersey, New Hampshire, New York, and Rhode Island.

Table 12
Foxwoods Resort: Estimated Patron Origins by State, 1995 to 2015

| | Feb-99 | Apr-04 | Feb-06 | Feb-08 | Jan-09 | Feb-10 | Feb-11 | Feb-12 | Feb-13 | Feb-15 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Massachusetts | 36.0% | 36.0% | 34.8% | 36.0% | 31.4% | 35.7% | 31.0% | 32.2% | 32.1% | 32.2% |
| Connecticut | 28.3% | 26.5% | 33.3% | 33.0% | 35.9% | 31.9% | 36.9% | 35.3% | 38.0% | 39.8% |
| Rhode Island | 13.3% | 15.4% | 13.9% | 13.0% | 13.2% | 13.0% | 13.2% | 12.6% | 11.7% | 11.0% |
| New Hampshire | 3.0% | 2.6% | 3.1% | 3.1% | 3.2% | 2.8% | 3.0% | 3.5% | 2.9% | 2.6% |
| Maine | 1.5% | 1.7% | 1.3% | 1.4% | 1.1% | 1.2% | 1.6% | 2.2% | 1.8% | 1.2% |
| Vermont | 0.7% | 0.6% | 0.5% | 0.3% | 0.3% | 0.3% | 0.2% | 0.5% | 0.3% | 0.5% |
| New York | 11.9% | 10.6% | 9.0% | 9.2% | 10.8% | 11.3% | 10.0% | 11.0% | 9.8% | 9.3% |
| New Jersey | N/A | 4.0% | 2.0% | 1.9% | 2.1% | 2.0% | 1.6% | 1.3% | 1.9% | 1.7% |
| Other | 5.3% | 2.5% | 2.1% | 2.1% | 2.0% | 1.8% | 2.5% | 1.4% | 1.5% | 1.7% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: Pyramid Associates, LLC. **Note:** The statistical margin of error for all Foxwoods surveys is +/- < 1%.
NA = Data not available or less than 0.1% (included in Other).

⁶⁰ The University of Connecticut Center for Economic Analysis (Carstensen et al. 2000) conducted a patron intercept survey from September 7 to 13, 1999 with 496 respondents. The UCCEA survey found that 33% of patrons lived in Massachusetts, 27.5% in Connecticut, 17.2% in Rhode Island, 2.6% in New Hampshire, 1.8% in Vermont, 0.8% in New York, 9.2% in New York, and 2.0% in New Jersey, and 5.5% in other states. The reliability of the findings is bolstered by the fact that two different survey methodologies arrived at comparable results during similar periods.

Table 13

| Mohegan Sun: Estimated Patron Origins by State, 1999 to 2015 | | | | | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | Feb-99 | Apr-04 | Feb-06 | Feb-08 | Jan-09 | Feb-10 | Feb-11 | Feb-12 | Feb-13 | Feb-15 |
| Massachusetts | 22.8% | 21.0% | 20.9% | 20.7% | 16.6% | 18.5% | 19.5% | 20.2% | 18.5% | 18.3% |
| Connecticut | 46.0% | 44.3% | 52.7% | 53.8% | 56.7% | 56.5% | 53.7% | 53.7% | 57.5% | 59.9% |
| Rhode Island | 7.8% | 5.6% | 4.6% | 4.2% | 3.9% | 4.5% | 4.2% | 4.3% | 4.5% | 3.4% |
| New Hampshire | 1.8% | 1.5% | 2.0% | 1.5% | 1.3% | 1.4% | 1.8% | 1.9% | 1.7% | 1.1% |
| Maine | 0.8% | 0.9% | 0.8% | 0.6% | 0.4% | 0.7% | 0.6% | 0.7% | 0.5% | 0.3% |
| Vermont | 0.4% | 0.4% | 0.4% | 0.3% | 0.3% | 0.4% | 0.3% | 0.5% | 0.4% | 0.4% |
| New York | 15.6% | 19.6% | 14.2% | 14.8% | 15.9% | 15.7% | 15.3% | 15.7% | 13.4% | 12.7% |
| New Jersey | N/A | 4.1% | 2.4% | 1.9% | 1.8% | 1.0% | 2.3% | 1.6% | 1.7% | 1.4% |
| Other | 4.8% | 2.7% | 2.0% | 2.2% | 3.1% | 1.3% | 2.3% | 1.4% | 1.8% | 2.5% |
| Total | 100.0% |

Source: Pyramid Associates, LLC. **Note:** The statistical margin of error for all Mohegan surveys is +/- < 1%.

NA = Data not available or less than 0.1% (included in Other).

Table 14

| Twin River: Estimated Patron Origins by State, 2004 to 2015 | | | | | | | | | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | Apr-04 | Feb-06 | Feb-08 | Jan-09 | Feb-10 | Feb-11 | Feb-12 | Feb-13 | Feb-15 |
| Massachusetts | 34.6% | 40.5% | 42.3% | 40.6% | 47.5% | 46.8% | 51.1% | 51.4% | 51.9% |
| Connecticut | - | 0.6% | 1.4% | 2.4% | 1.4% | 1.0% | 0.9% | 0.8% | 0.9% |
| Rhode Island | 65.4% | 57.8% | 54.6% | 54.5% | 49.0% | 49.7% | 46.2% | 45.8% | 45.1% |
| New Hampshire | - | 0.2% | 0.6% | 0.9% | 1.0% | 0.9% | 0.6% | 0.5% | 0.5% |
| Maine | - | 0.1% | 0.1% | 0.2% | 0.2% | 0.1% | 0.1% | 0.1% | 0.1% |
| Vermont | - | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| New York | - | 0.2% | 0.3% | 0.5% | 0.2% | 0.5% | 0.2% | 0.2% | 0.3% |
| New Jersey | - | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.0% | 0.1% | 0.2% |
| Other | - | 0.5% | 0.6% | 0.7% | 0.6% | 0.7% | 0.7% | 1.1% | 1.0% |
| Total | 100.0% |

Source: Pyramid Associates, LLC. **Note:** The statistical margin of error for all Twin River surveys is +/- < 1%.

The expansion, amenity improvements, and the addition of table games to Twin River have made it a far more competitive and attractive gaming facility. However, the improvements to Twin River since 2007 have recaptured an ever growing percentage of Rhode Islanders' expenditures at Foxwoods and Mohegan Sun (see Tables 13 and 14 and Appendix A), while simultaneously capturing visitors from Massachusetts who would otherwise travel to Connecticut. Twin River has also generated a slight increase in visits from New Hampshire and other pass-through visitors from other states.

In previous years' *New England Casino Gaming Updates*, it has been noted that a major element of Twin River's resurgence after 2007 was its ability to attract more Massachusetts residents, who now account for 51.9 percent of its customer base, compared to 40.5 percent in 2006 and 34.6 percent in 2004. In CY 2014, Massachusetts residents were spending \$312.8 million per year at Twin River compared to \$145.4 million per year in CY 2006 (+121.3%).⁶¹ It is unquestionable that the vast majority of Twin River's growth over the last seven years has been fueled primarily by an increase of expenditures by Massachusetts residents.

In addition, Twin River appears to be intercepting a slightly larger number of patrons from northern New England – Maine and New Hampshire – who were shortening trip lengths due to higher gasoline prices and the substitution of commuter gaming for destination gaming. This trend will likely continue as a result of adding table games at Twin River.

However, Twin River has also cannibalized Newport Grand Slots since its 2007 improvements. Newport Grand Slots has reported year-to-year revenue declines in nine of the last ten years. However, the revenue declines at

⁶¹ Clyde W. Barrow, *New England Casino Gaming Update, 2007* (North Dartmouth, MA: Center for Policy Analysis, 2007), see Appendix A.

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Newport Grand Slots are also partly due to a decline in its Southeastern Massachusetts customer base, which has one of the lowest income levels in the Bay State, while continuing to suffer some of the state's highest unemployment rates. Newport Grand has also seen a significant portion of its Massachusetts customer base diverted to Twin River (see Table 15).

Table 15

| Newport Grand Slots: Estimated Patron Origins by State, 2004 to 2015 | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Apr-04 | Feb-06 | Feb-08 | Jan-09 | Feb-10 | Feb-11 | Feb-12 | Feb-13 | Feb-15 |
| Massachusetts | 72.8% | 43.8% | 43.1% | 38.9% | 44.5% | 42.9% | 43.4% | 44.5% | 44.1% |
| Connecticut | - | 2.1% | 1.8% | 1.9% | 2.2% | 1.8% | 1.8% | 0.9% | 0.8% |
| Rhode Island | 27.2% | 52.1% | 52.7% | 56.3% | 50.7% | 52.7% | 52.0% | 51.5% | 52.1% |
| New Hampshire | - | 0.2% | 0.2% | 0.5% | 0.2% | 0.2% | 0.4% | 0.3% | 0.2% |
| Maine | - | 0.1% | 0.0% | 0.0% | 0.2% | 0.0% | 0.1% | 0.0% | 0.0% |
| Vermont | - | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| New York | - | 0.4% | 0.9% | 1.1% | 0.7% | 1.2% | 0.9% | 0.6% | 0.5% |
| New Jersey | - | 0.1% | 0.2% | 0.1% | 0.1% | 0.2% | 0.2% | 0.1% | 0.1% |
| Other | - | 1.2% | 1.0% | 1.2% | 1.3% | 1.0% | 1.2% | 2.1% | 2.2% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: Pyramid Associates, LLC. **Note:** The statistical margin of error for all Newport surveys is +/- < 1%.

The market entry of two casino in Maine -- Hollywood Casino Bangor and Oxford Casino -- has partially reversed the flow of gambling traffic from Maine and New Hampshire to Connecticut (see Table 12 and Table 13). In CY 2014, Mainers spent \$13.8 million at Connecticut's two casinos compared to \$33.1 million in CY 2006 (-58.3%), although it is likely that some of this decline is due to a general decline in the propensity to gamble.⁶² Hollywood Casino Bangor continues to draw the vast majority of its customers from Maine (see Table 16), although the 2012 *New England Gaming Behavior Survey* found that 86% of its customers travel more than 30 minutes to reach the facility, while 75% travel more than 60 minutes to reach the facility. Similarly, although 89.4% of Oxford Casino's customers reside in Maine (see Table 17), the 2012 *New England Gaming Behavior Survey* found that 78% of its customers travel more than 60 minutes to reach the facility.⁶³

Table 16

| Hollywood Casino Bangor: Estimated Patron Origins by State, 2006 to 2013 | | | | |
|---|--------|--------|--------|--------|
| | Nov-06 | Jan-09 | Feb-13 | Feb-15 |
| Massachusetts | 3.6% | 1.0% | 2.2% | 2.0% |
| Connecticut | 0.0% | 0.0% | 0.2% | 0.1% |
| Rhode Island | 0.0% | 0.0% | 0.3% | 0.1% |
| New Hampshire | 1.9% | 1.0% | 2.1% | 2.0% |
| Maine | 94.2% | 95.5% | 86.1% | 87.8% |
| Vermont | 0.0% | 0.4% | 0.5% | 0.5% |
| New York | 0.0% | 0.3% | 0.1% | 0.1% |
| New Jersey | 0.0% | 0.3% | 0.5% | 0.0% |
| Other | 0.3% | 1.5% | 8.0% | 7.4% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% |

Source: Pyramid Associates, LLC. **Notes:** The statistical margin of error for the 2009 and 2013 surveys is +/- 2.6%. The statistical margin of error for the 2015 survey is +/- < 1.0%. The Other category for 015 includes 3.3% of visitors from Canada, which primarily originate in New Brunswick.

⁶² Clyde W. Barrow, *New England Casino Gaming Update, 2007* (North Dartmouth, MA: Center for Policy Analysis, 2007), see Appendix A.

⁶³ Clyde W. Barrow and David R. Borges, *Bring It On Home: An Overview of Gaming Behavior in New England; Results of the 4th Biennial Gaming Behavior Survey* (North Dartmouth, MA: Center for Policy Analysis, March 2012). An informal license plate count by an Associated Press reporter on Hollywood's opening day observed "a smattering of license plates from Massachusetts, New Hampshire, New York, and New Brunswick," see, Canfield (2005). Similarly, an informal license plate count by the *Bangor Daily News*, November 21, 2005 found that "sprinkled here and there throughout the lot were plates from Vermont, Massachusetts, Connecticut, and New Brunswick, but most of the gamblers parked in front of the slots machines inside were Mainers." According to information from Amy Kenney, Manager of Marketing and Public Relations for Penn National Gaming, Inc., 85% to 90% of Hollywood Casino's Players Club members are Maine residents.

Table 17
Oxford Casino:
Estimated Patron Origins by State,
2013 to 2015

| | Feb-13 | Feb-15 |
|---------------|--------|--------|
| Massachusetts | 4.0% | 2.0% |
| Connecticut | 0.4% | 0.0% |
| Rhode Island | 0.1% | 0.1% |
| New Hampshire | 10.4% | 9.9% |
| Maine | 81.6% | 86.2% |
| Vermont | 0.5% | 0.5% |
| New York | 0.2% | 0.2% |
| New Jersey | 0.2% | 0.1% |
| Other | 2.8% | 1.1% |
| Total | 100.0% | 100.0% |

Source: Pyramid Associates, LLC.

Note: The statistical margin of error for 2013 survey is +/- 2.6% and for 2015 survey is +/- < 2.6%.

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3.00 ESTIMATED TOTAL EXPENDITURES BY PATRONS

3.10 FOXWOODS RESORT & MOHEGAN SUN

Native American casinos are not required to publish financial information, or other data, about their operations. However, the gaming compacts between the State of Connecticut and the Mashantucket Pequot and Mohegan Tribes require them to share 25 percent of slot revenues with the state in exchange for exclusive rights to operate slot machines. The slot revenues received by the state from Foxwoods Resort Casino and Mohegan Sun Casino are a state public record published by the Connecticut Division of Special Revenue, while more detailed information about Mohegan Sun's operations and revenues are reported to the U.S. Securities & Exchange Commission on Form 10-K.⁶⁴ Various public statements by the casinos' executives in the media, at bondholders' meetings, and at industry summits provide additional insight into the casinos' internal operations.

In Calendar Year 2014, Foxwoods paid \$120,899,855 to the State of Connecticut. Mohegan Sun paid \$145,978,050 to the State of Connecticut in CY 2014.

Each casino's slot win is reported monthly to the Connecticut Division of Special Revenue. Slot revenues (win) for Foxwoods were \$483,559,416 in CY 2014 (-9.0%). Slot revenues (win) for Mohegan Sun in CY 2014 were \$583,912,203.

National and micro-level economic impact assessments of casino activity in the United States consistently document that slot revenues account on average for 70% of total gross gaming revenues at destination resort casinos. This ratio yields Calendar Year 2014 gross gaming revenues for Foxwoods of approximately \$691,006,405 compared to \$1,166,405,528 in CY 2006, which was the peak year for gross gaming revenues at Foxwoods.

Mohegan Sun's estimated gross gaming revenues are based on data and ratios derived from its FY 2012 SEC Form 10-K filing. Mohegan Sun's estimated gross gaming revenues for CY 2014 are \$844,920,958, compared to 1,302,167,671 in CY 2006, which was the peak year for gross gaming revenues at Mohegan Sun.

Previous economic impact assessments of Foxwoods Resort, and more recently Mohegan Sun, have been conducted by Arthur W. Wright Associates (1993), the WEFA Group (1997), and the University of Connecticut Center for Economic Analysis (2000). The 1993 and 2000 studies were commissioned by Foxwoods Resorts and the 1997 study was commissioned by the Connecticut State Lottery.⁶⁵ The three studies include proprietary data on Foxwoods's operations that make it possible to estimate the casino's non-gaming revenues from hotels, restaurants, shops, entertainment, and other attractions and to compare those to national ratios for similar gaming establishments (e.g., Atlantic City, Mississippi, and Las Vegas). Non-gaming revenues for Foxwoods are estimated to be 22.5% of total revenues.⁶⁶ Based on its FY 2011 SEC Form 10-K filing, non-gaming revenues for Mohegan Sun are known to be 17.9% of total revenues.

These ratios yield Calendar Year 2014 total (gaming + non-gaming) revenues of approximately \$882.1 million for Foxwoods Resort and \$1.0 billion for Mohegan Sun.

⁶⁴ Mohegan Tribal Gaming Authority and Penn National, Inc., the owner of Hollywood Slots, report financial and other data on U.S. Securities & Exchange Commission Form 10-K (Florin 2004b).

⁶⁵ See, Arthur W. Wright Associates (1993), the WEFA Group (1997), Economic Research Associates (1999), the University of Connecticut Center for Economic Analysis (2000), and public statements by Foxwoods officials (*Boston Globe*, October 21, 1995, 41).

⁶⁶ William Sherlock, a former Foxwoods CEO, stated that non-gaming revenues account for 22% of total revenues, but that its business strategy is to gradually increase the ratio of revenues coming from non-gaming amenities and entertainment, see, Kane (2010).

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If the patrons from various states account for an equal or average per capita share of the two facilities' annual total revenues,⁶⁷ then it is estimated that:

- Massachusetts residents spent approximately \$475.6 million in CY 2014 at Connecticut's two Native American casinos, compared to \$624.1 million in CY 2011 and \$876.2 million in CY 2006 (see Appendix A).
- Rhode Island residents spent approximately \$133.1 million in CY 2014 at Connecticut's two Native American casinos, compared to \$200.0 million in CY 2011 and \$291.6 in CY 2006 (see Appendix A).
- New Hampshire residents spent approximately \$50.4 million in CY at Connecticut's two Native American casinos, compared to 2012 \$64.2 million in CY 2011 and \$80.4 million in CY 2006 (see Appendix A).
- Maine residents spent approximately \$34.5 million in CY 2014 at Connecticut's two Native American casinos, compared to \$34.3 million in CY 2011 and \$33.1 million in CY 2006 (see Appendix A).
- New York residents spent approximately \$213.7 million CY 2014 at Connecticut's two Native American casinos, compared to \$321.1 million in CY 2011 and \$365.5 million in CY 2006 (see Appendix A).

Based on these figures, it is estimated that:

- Massachusetts residents contributed \$65.6 million to the Connecticut state treasury as a result of its citizens' gaming activity in that state.
- Rhode Island residents contributed \$18.3 million to the Connecticut state treasury as a result of its citizens' gaming activity in that state.
- New Hampshire residents contributed \$4.7 million to the Connecticut state treasury as a result of its citizens' gaming activity in that state.
- Maine residents contributed \$1.9 million to the Connecticut state treasury as a result of its citizens' gaming activity in that state.
- New York residents contributed more than \$29.8 million to the Connecticut state treasury as a result of its citizens' gaming activity in that state.

⁶⁷ This is a highly conservative assumption, but one that is consistent with the standard average or per capita cost method most commonly used in fiscal impact analyses, see Burchell, Listokin and Dolphin (1985). A review of the Center for Policy Analysis methodology conducted by scholars at the John F. Kennedy School of Government concludes that "these figures are conservative in that they assume that out-of-state visitors spend the same amount of time and money at the Connecticut casinos. Evidence from Louisiana indicates that out-of-state customers spend more time at a casino than in-state residents...even more might be recaptured than these calculations would indicate" (Taylor et al. 2002, 7).

3.20 TWIN RIVER & NEWPORT GRAND SLOTS

Twin River's gross gaming revenue for Calendar Year 2014 was \$548.4, compared to \$462.7 million in CY 2011 and \$329.4 million in CY 2006.

The net terminal income at Newport Grand Slots was \$45.2 million for Calendar Year 2014 compared to \$50.0 million in CY 2011 and \$77.1 million in CY 2006.

The total estimated gaming and non-gaming expenditures at Twin River and Newport Grand Slots by Rhode Island residents was \$297.5 million in CY 2014, compared to \$263.7 million in CY 2011, and \$251.3 in CY 2006 (see Appendix A).

The total estimated gaming and non-gaming expenditures at Twin River and Newport Grand Slots by Massachusetts residents was \$334.5 million in CY 2014, compared to \$284.0 million in CY 2011, and \$182.2 million in CY 2006 (see Appendix A).

The total estimated gaming and non-gaming expenditures at Twin River and Newport Grand Slots by New Hampshire residents was \$3.1 million in CY 2014, compared to \$3.3 million in CY 2011, and \$0.9 million in CY 2006 (see Appendix A)

- Massachusetts residents contributed approximately \$185.7 million to the Rhode Island state treasury in CY 2014 as a result of its citizens' gaming and other gaming related expenditures in that state.
- Rhode Island residents contributed approximately \$165.4 million to the Rhode Island state treasury in CY 2014 as a result of its citizens' gaming and other gaming related expenditures in that state.
- New Hampshire residents contributed approximately \$1.7 million to the Rhode Island state treasury in CY 2014 as a result of its citizens' gaming and other gaming related expenditures in that state.

3.30 HOLLYWOOD CASINO & OXFORD CASINO

Hollywood Casino Bangor and Oxford Casino in Maine report slot machine handle and win and table games drop and win to the Maine Gaming Control Board on a monthly basis. Gross gaming revenues at Hollywood Casino were \$54.4 million in Calendar Year 2014, compared to \$59.5 million in CY 2011, and \$37.5 million in CY 2006.

Gross gaming revenues at Oxford Casino were \$72.8 million in CY 2014, compared to \$36.5 million in Calendar Year 2012.⁶⁸

More detailed information about Hollywood Casino's operations and revenues are reported to the U.S. Securities & Exchange Commission on Form 10-K by Penn National Gaming, Inc. Based on information in this filing, it is estimated that non-gaming revenues account for approximately 10.1 percent of Hollywood Casino's total revenues, or \$5.5 million.⁶⁹ Thus, the total estimated gaming and non-gaming revenues at Hollywood Casino

⁶⁸ Oxford Casino opened in 2012.

⁶⁹ This may be a conservative estimate since non-gaming revenues (food and beverage, hotel, retail, and entertainment) account for 14.5% of total revenues across all of Penn National's (2012) casino properties in the United States.

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Bangor was \$59.9 million in CY 2014, compared to \$65.5 million in CY 2011, and \$38.6 million in CY 2006 (see Appendix A).

It is estimated that non-gaming revenues account for approximately 4.6 percent of Oxford Casino's total revenues, or \$3.4 million. Thus, the total estimated gaming and non-gaming revenues at Oxford Casino was \$76.2 million in CY 2014 (see Appendix A).

If the patrons from various states account for an equal or average per capita share of the gaming facilities' annual total revenues, then it is estimated that:

- Maine residents spent approximately \$118.3 million in Calendar Year 2014 at Maine's two casinos, compared to \$62.5 million in CY 2011, and \$36.4 million in CY 2006 (see Appendix A).
- Massachusetts residents spent approximately \$2.7 million in Calendar Year 2014 at Maine's two casinos, compared to \$655,000 in CY 2011 and \$1.4 million in CY 2006.
- New Hampshire residents spent approximately \$8.7 million in Calendar Year 2014 at Maine's two casinos, compared to \$655,000 in CY 2011, and \$1.4 million in CY 2006.

Based on these figures, it is estimated that:

- Maine residents contributed approximately \$23.8 million to the Maine general treasury and to the City of Bangor as a result of its citizens' gaming and other expenditure activity in that state.
- Massachusetts residents contributed approximately \$0.5 million to the Maine general treasury and to the City of Bangor as a result of its citizens' gaming and other expenditure activity in that state.
- New Hampshire residents contributed approximately \$1.7 million to the Maine general treasury and to the City of Bangor as a result of its citizens' gaming and other expenditure activity in that state.

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APPENDICES

Northeastern Casino Gaming Update, 2015

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| APPENDIX A | | | | | | |
|------------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|------------------------------------|--------------------------------------|---|
| CONNECTICUT FOXWOODS | Slot Win \$483,559,416 | Other Gaming \$207,446,989 | Total Gaming \$691,006,405 | NonGaming \$201,082,864 | Grand Total \$892,089,269 | Contribution to CT \$120,889,855 |
| MA | \$155,706,132 | \$66,797,930 | \$222,504,062 | \$64,748,682 | \$287,252,745 | \$38,805,643 |
| RI | \$53,191,536 | \$22,819,169 | \$76,010,705 | \$22,119,115 | \$98,129,820 | \$14,144,113 |
| CT | \$192,456,648 | \$82,563,902 | \$275,020,549 | \$80,030,980 | \$355,051,529 | \$45,938,145 |
| NH | \$12,572,545 | \$5,393,622 | \$17,966,167 | \$5,228,154 | \$23,194,321 | \$3,505,806 |
| ME | \$5,802,713 | \$2,489,364 | \$8,292,077 | \$2,412,994 | \$10,705,071 | \$2,176,017 |
| VT | \$2,417,797 | \$1,037,235 | \$3,455,032 | \$1,005,414 | \$4,460,446 | \$362,670 |
| NY | \$44,971,026 | \$19,292,570 | \$64,263,596 | \$18,700,706 | \$82,964,302 | \$11,847,206 |
| NJ | \$8,220,510 | \$3,526,599 | \$11,747,109 | \$3,418,409 | \$15,165,518 | \$2,296,907 |
| OTHER | \$8,220,510 | \$3,526,599 | \$11,747,109 | \$3,418,409 | \$15,165,518 | \$1,813,348 |
| MOHEGAN SUN | \$583,912,203 | \$261,008,755 | \$844,920,958 | \$184,192,769 | \$1,029,113,727 | \$145,978,050 |
| MA | \$106,855,933 | \$47,764,602 | \$154,620,535 | \$33,707,277 | \$188,327,812 | \$26,713,983 |
| RI | \$19,853,015 | \$8,874,298 | \$28,727,313 | \$6,262,554 | \$34,989,867 | \$4,963,254 |
| CT | \$349,763,410 | \$156,344,244 | \$506,107,654 | \$110,331,469 | \$616,439,122 | \$87,440,852 |
| NH | \$6,423,034 | \$2,871,096 | \$9,294,131 | \$2,026,120 | \$11,320,251 | \$1,605,759 |
| ME | \$1,751,737 | \$783,026 | \$2,534,763 | \$552,578 | \$3,087,341 | \$437,934 |
| VT | \$2,335,649 | \$1,044,035 | \$3,379,684 | \$736,771 | \$4,116,455 | \$583,912 |
| NY | \$74,156,850 | \$33,148,112 | \$107,304,962 | \$23,392,482 | \$130,697,443 | \$18,539,212 |
| NJ | \$8,174,771 | \$3,654,123 | \$11,828,893 | \$2,578,699 | \$14,407,592 | \$2,043,693 |
| OTHER | \$14,597,805 | \$6,525,219 | \$21,123,024 | \$4,604,819 | \$25,727,843 | \$3,649,451 |
| TOTAL CT | \$1,067,471,619 | \$468,455,744 | \$1,535,927,363 | \$385,275,633 | \$1,921,202,996 | \$266,867,905 |
| MA | \$262,562,065 | \$114,562,533 | \$377,124,598 | \$98,455,959 | \$475,580,557 | \$65,640,516 |
| RI | \$73,044,551 | \$31,693,466 | \$104,738,017 | \$28,381,669 | \$133,119,686 | \$18,261,138 |
| CT | \$542,220,057 | \$238,908,146 | \$781,128,203 | \$190,362,449 | \$971,490,652 | \$135,555,014 |
| NH | \$18,995,579 | \$8,264,718 | \$27,260,297 | \$7,254,275 | \$34,514,572 | \$4,748,895 |
| ME | \$7,554,450 | \$3,272,390 | \$10,826,840 | \$2,965,573 | \$13,792,412 | \$1,888,612 |
| VT | \$4,753,446 | \$2,081,270 | \$6,834,716 | \$1,742,185 | \$8,576,901 | \$1,188,361 |
| NY | \$119,127,875 | \$52,440,682 | \$171,568,557 | \$42,093,188 | \$213,661,745 | \$29,781,969 |
| NJ | \$16,395,281 | \$7,180,721 | \$23,576,002 | \$5,997,107 | \$29,573,110 | \$4,098,820 |
| OTHER | \$22,818,315 | \$10,051,818 | \$32,870,133 | \$8,023,228 | \$40,893,361 | \$5,704,579 |
| RHODE ISLAND TWIN RIVER | NTI \$466,015,784 | Other Gaming \$82,419,476 | Total Gaming \$548,435,260 | NonGaming \$54,295,091 | Grand Total \$602,730,351 | Contribution to RI \$333,404,763 |
| MA | \$241,862,192 | \$42,775,708 | \$284,637,900 | \$28,179,152 | \$312,817,052 | \$173,037,072 |
| RI | \$210,173,119 | \$37,171,184 | \$247,344,302 | \$24,487,086 | \$271,831,388 | \$150,365,548 |
| CT | \$4,194,142 | \$741,775 | \$4,935,917 | \$488,656 | \$5,424,573 | \$3,000,643 |
| NH | \$2,330,079 | \$412,097 | \$2,742,176 | \$271,475 | \$3,013,652 | \$1,667,024 |
| ME | \$466,016 | \$82,419 | \$548,435 | \$54,295 | \$602,730 | \$333,405 |
| VT | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| NY | \$1,398,047 | \$247,258 | \$1,645,306 | \$162,885 | \$1,808,191 | \$1,000,214 |
| NJ | \$932,032 | \$164,839 | \$1,096,871 | \$108,590 | \$1,205,461 | \$666,810 |
| OTHER | \$4,660,158 | \$824,195 | \$5,484,353 | \$542,951 | \$6,027,304 | \$3,334,048 |
| NEWPORT GRAND | \$45,179,615 | N/A | \$45,179,615 | \$4,066,165 | \$49,245,780 | \$28,788,451 |
| MA | \$19,924,210 | N/A | \$19,924,210 | \$1,793,179 | \$21,717,389 | \$12,695,707 |
| RI | \$23,538,579 | N/A | \$23,538,579 | \$2,118,472 | \$25,657,052 | \$14,998,783 |
| CT | \$361,437 | N/A | \$361,437 | \$32,529 | \$393,966 | \$230,308 |
| NH | \$90,359 | N/A | \$90,359 | \$8,132 | \$98,492 | \$57,577 |
| ME | \$0 | N/A | \$0 | \$0 | \$0 | \$0 |
| VT | \$0 | N/A | \$0 | \$0 | \$0 | \$0 |
| NY | \$225,898 | N/A | \$225,898 | \$20,331 | \$246,229 | \$143,942 |
| NJ | \$45,180 | N/A | \$45,180 | \$4,066 | \$49,246 | \$28,788 |
| OTHER | \$993,952 | N/A | \$993,952 | \$89,456 | \$1,083,407 | \$633,346 |
| TOTAL RI | \$511,195,399 | \$82,419,476 | \$593,614,875 | \$58,361,256 | \$651,976,131 | \$362,193,214 |
| MA | \$261,786,402 | \$42,775,708 | \$304,562,110 | \$29,972,331 | \$334,534,441 | \$185,732,779 |
| RI | \$233,711,698 | \$37,171,184 | \$270,882,882 | \$26,605,558 | \$297,488,440 | \$165,364,331 |
| CT | \$4,555,579 | \$741,775 | \$5,297,354 | \$521,185 | \$5,818,539 | \$3,230,950 |
| NH | \$2,420,438 | \$412,097 | \$2,832,536 | \$279,608 | \$3,112,143 | \$1,724,601 |
| ME | \$466,016 | \$82,419 | \$548,435 | \$54,295 | \$602,730 | \$333,405 |
| VT | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| NY | \$1,623,945 | \$247,258 | \$1,871,204 | \$183,216 | \$2,054,420 | \$1,144,157 |
| NJ | \$977,211 | \$164,839 | \$1,142,050 | \$112,656 | \$1,254,706 | \$695,598 |
| OTHER | \$5,654,109 | \$824,195 | \$6,478,304 | \$632,407 | \$7,110,711 | \$3,967,394 |

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APPENDIX A (continued)

| MAINE | Slot Win | Other Gaming | Total Gaming | NonGaming | Grand Total | Contribution to ME |
|--------------------|------------------------|----------------------|------------------------|----------------------|------------------------|---------------------------|
| HOLLYWOOD | \$46,410,579 | \$8,026,814 | \$54,437,393 | \$5,498,177 | \$59,935,570 | \$13,326,856 |
| MA | \$928,212 | \$160,536 | \$1,088,748 | \$109,964 | \$1,198,711 | \$266,537 |
| RI | \$46,411 | \$8,027 | \$54,437 | \$5,498 | \$59,936 | \$13,327 |
| CT | \$46,411 | \$8,027 | \$54,437 | \$5,498 | \$59,936 | \$13,327 |
| NH | \$928,212 | \$160,536 | \$1,088,748 | \$109,964 | \$1,198,711 | \$266,537 |
| ME | \$40,748,488 | \$7,047,543 | \$47,796,031 | \$4,827,399 | \$52,623,430 | \$11,700,979 |
| VT | \$232,053 | \$40,134 | \$272,187 | \$27,491 | \$299,678 | \$66,634 |
| NY | \$46,411 | \$8,027 | \$54,437 | \$5,498 | \$59,936 | \$13,327 |
| NJ | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| OTHER | \$3,434,383 | \$593,984 | \$4,028,367 | \$406,865 | \$4,435,232 | \$986,187 |
| OXFORD | \$58,368,047 | \$14,464,188 | \$72,832,235 | \$3,350,283 | \$76,182,518 | \$14,022,119 |
| MA | \$1,167,361 | \$289,284 | \$1,456,645 | \$67,006 | \$1,523,650 | \$280,442 |
| RI | \$58,368 | \$14,464 | \$72,832 | \$3,350 | \$76,183 | \$14,022 |
| CT | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| NH | \$5,778,437 | \$1,431,955 | \$7,210,391 | \$331,678 | \$7,542,069 | \$1,388,190 |
| ME | \$50,313,257 | \$12,468,130 | \$62,781,387 | \$2,887,944 | \$65,669,330 | \$12,087,067 |
| VT | \$291,840 | \$72,321 | \$364,161 | \$16,751 | \$380,913 | \$70,111 |
| NY | \$116,736 | \$28,928 | \$145,664 | \$6,701 | \$152,365 | \$28,044 |
| NJ | \$58,368 | \$14,464 | \$72,832 | \$3,350 | \$76,183 | \$14,022 |
| OTHER | \$583,680 | \$144,642 | \$728,322 | \$33,503 | \$761,825 | \$140,221 |
| TOTAL MAINE | \$104,778,626 | \$22,491,002 | \$127,269,628 | \$8,848,460 | \$136,118,088 | \$27,348,975 |
| MA | \$2,095,573 | \$449,820 | \$2,545,393 | \$176,969 | \$2,722,362 | \$546,979 |
| RI | \$104,779 | \$22,491 | \$127,270 | \$8,848 | \$136,118 | \$27,349 |
| CT | \$46,411 | \$8,027 | \$54,437 | \$5,498 | \$59,936 | \$13,327 |
| NH | \$6,706,648 | \$1,592,491 | \$8,299,139 | \$441,642 | \$8,740,781 | \$1,654,727 |
| ME | \$91,061,745 | \$19,515,673 | \$110,577,418 | \$7,715,343 | \$118,292,761 | \$23,788,046 |
| VT | \$523,893 | \$112,455 | \$636,348 | \$44,242 | \$680,590 | \$136,745 |
| NY | \$163,147 | \$36,955 | \$200,102 | \$12,199 | \$212,301 | \$41,371 |
| NJ | \$58,368 | \$14,464 | \$72,832 | \$3,350 | \$76,183 | \$14,022 |
| OTHER | \$4,018,063 | \$738,626 | \$4,756,689 | \$440,368 | \$5,197,057 | \$1,126,409 |
| NEW ENGLAND | Slot Win | Other Gaming | Total Gaming | NonGaming | Grand Total | Taxes Paid |
| TOTAL | \$1,683,445,644 | \$573,366,222 | \$2,256,811,866 | \$452,485,349 | \$2,709,297,215 | \$656,410,094 |
| MA | \$526,444,040 | \$157,788,061 | \$684,232,100 | \$128,605,259 | \$812,837,360 | \$251,920,275 |
| RI | \$306,861,027 | \$68,887,141 | \$375,748,168 | \$54,996,076 | \$430,744,244 | \$183,652,818 |
| CT | \$546,822,047 | \$239,657,948 | \$786,479,995 | \$190,889,132 | \$977,369,127 | \$138,799,292 |
| NH | \$28,122,665 | \$10,269,306 | \$38,391,972 | \$7,975,524 | \$46,367,496 | \$8,128,222 |
| ME | \$99,082,210 | \$22,870,482 | \$121,952,693 | \$10,735,211 | \$132,687,903 | \$26,010,063 |
| VT | \$5,277,339 | \$2,193,725 | \$7,471,064 | \$1,786,428 | \$9,257,492 | \$1,325,106 |
| NY | \$120,914,968 | \$52,724,895 | \$173,639,863 | \$42,288,603 | \$215,928,466 | \$30,967,497 |
| NJ | \$17,430,860 | \$7,360,025 | \$24,790,885 | \$6,113,114 | \$30,903,999 | \$4,808,440 |
| OTHER | \$32,490,488 | \$11,614,639 | \$44,105,126 | \$9,096,002 | \$53,201,129 | \$10,798,381 |

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About the Author

Clyde W. Barrow, Ph.D.

Pyramid Associates, LLC is a registered Massachusetts company (est. 2006) that specializes in gaming market analysis (gravity modeling), industry analysis, economic base analysis, economic impact analysis, workforce development planning, and behavioral survey research. Recent clients (2010-2015) include state and local governments, companies, tribes, and other entities doing business in California, Connecticut, Illinois, Maine, Massachusetts, New Hampshire, Nevada, New York, Oregon, Pennsylvania, Rhode Island, Texas, Washington, and Wisconsin.

The company's general manager (and principal investigator for this report) is Dr. Clyde W. Barrow (Ph.D., UCLA, 1984). Dr. Barrow is a Professor of Public Policy and Chair of the Department of Political Science at the University of Texas-Rio Grande Valley. He was previously a Professor of Public Policy and Director of the Center for Policy Analysis at the University of Massachusetts Dartmouth (1987-2014). In addition to teaching and conducting research and analysis at the University of Texas, he has served as a consultant to governments, private companies, business and trade associations, labor unions, non-profit organizations, and educational institutions across the United States.

Dr. Barrow specializes in public policy research and analysis. His areas of expertise include feasibility analysis, economic impact analysis, regional economic development, survey development and implementation, and policy analysis. His work has involved a wide variety of industries, including casino gaming, retail trade, science and technology, textiles and apparel, national defense, education, health care, arts and crafts, and cultural or creative industries. He has also authored more than 250 applied policy monographs and dozens of articles in trade publications, magazines, and newspapers.

For two decades, Dr. Barrow has been studying the economic, fiscal, and social impacts of casino gaming, including commercial casinos, racinos, and Indian gaming. He has studied existing and proposed gaming facilities throughout the United States and has served as a consultant to several Fortune 500 companies. He is project manager for the Northeastern Gaming Research Project, which annually conducts research and analysis of casino gaming in the New England and the Mid-Atlantic states.

Dr. Barrow's research has been published in various scholarly journals, including *Gaming Law Review and Economics*, *Gaming Research & Review Journal*, *Casino Enterprise Management*, *Journal of Travel Research*, *Massachusetts Benchmarks*, and *Journal of Economic Issues*. He has also published many books, book chapters, applied policy monographs, book reviews, and articles in trade publications, magazines, and newspapers. He has delivered numerous conference papers and invited talks, and delivered expert testimony on gaming to state legislatures, arbitration panels, courts, and to various state and municipal agencies. His research and expert commentary have been cited in more than 3,000 newspaper articles, including the *Wall Street Journal*, *New York Times*, *Financial Times*, *Washington Post*, *Christian Science Monitor*, *USA Today*, *Forbes*, and *Time*.

Dr. Barrow holds a B.A. in Political Science from Texas A&M University, and an M.A. and Ph.D. in Political Science from the University of California, Los Angeles.