

NEW ENGLAND CASINO GAMING:

A FOXWOODS RESORT & MOHEGAN SUN, 2004 UPDATE



Prepared

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**CENTER FOR
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**CASINO GAMING IN NEW ENGLAND:
FOXWOODS RESORT & MOHEGAN SUN, 2004 UPDATE**

EXECUTIVE SUMMARY

The University of Massachusetts Dartmouth Center for Policy Analysis has updated its New England patron origin and fiscal impact analysis for Foxwoods Resort Casino and Mohegan Sun Casino for the calendar year 2003.

It is estimated that Massachusetts residents spent approximately \$829,000,000 at Connecticut's two casinos in Calendar Year 2003 compared to \$620,000,000 in CY 1998.

Based on this estimate, Massachusetts residents indirectly contributed approximately \$116,000,000 to the Connecticut state treasury as a result of gaming activity at the state's two casinos.

It is estimated that Rhode Island residents spent approximately \$301,000,000 at Connecticut's two casinos in Calendar Year 2003 compared to \$226,000,000 in CY 1998.

Based on this estimate, Rhode Island residents indirectly contributed approximately \$42,000,000 to the Connecticut state treasury as a result of gaming activity at the state's two casinos.

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CASINO GAMING IN NEW ENGLAND: FOXWOODS RESORT & MOHEGAN SUN, 2004 UPDATE

PURPOSE OF THE STUDY

In Fiscal Year 2004, forty-six of the fifty States faced combined budget deficits of \$69 billion. The Commonwealth of Massachusetts closed a \$2.5 billion budget deficit in FY 2004 through a combination of budget cuts, the elimination of selected tax loopholes, and numerous increases in user fees. In FY 2005, state budget officials anticipate that Massachusetts will again face a \$1.0 to \$1.5 billion budget deficit. Nevertheless, Governor Mitt Romney proposes to spend additional funds on Medicaid, K-12 education, higher education, affordable housing, and environmental initiatives. In this context, casinos and other forms of gaming revenue continue to be a significant fiscal policy and economic development issue in New England and elsewhere. As state legislatures begin budget deliberations throughout the country, several states are likely to consider the legalization or expansion of casino gaming, including Massachusetts, Rhode Island, Maine, Pennsylvania, Maryland, Kentucky, South Carolina, Kansas, Oklahoma, Illinois, Missouri, Iowa, Nebraska, and Idaho.

Consequently, the University of Massachusetts Dartmouth Center for Policy Analysis has updated its New England patron origin and fiscal impact analysis for Foxwoods Resort Casino and Mohegan Sun Casino for the calendar year 2003. The update applies patron origin ratios from the Center's 1999 study to calendar year 2003 financial data. The purpose of the 1999 study was to determine the geographic origins of visitors to Foxwoods Resort in Ledyard, Connecticut and Mohegan Sun in Uncasville, Connecticut, particularly the percentage of resort visitors who are residents of Massachusetts, Rhode Island, and other New England states. The estimate of patron origins was based on a sampling of 6,876 private automobiles and 201 tour buses at Foxwoods and a sampling of 6,517 private automobiles and 183 tour buses at Mohegan Sun. Fiscal impact data is derived primarily from the Connecticut Division of Special Revenue and the Securities and Exchange Commission.

DESCRIPTION OF THE FACILITIES

Foxwoods Resort and Mohegan Sun are the only two legally authorized gaming operations that offer both traditional slot machines and table games in New England. Foxwoods Resort Casino is located in Ledyard, Connecticut. Foxwoods, which is owned by the Mashantucket Pequot Tribe, is the largest gaming complex in the world with 320,000 square feet of gaming space. Foxwood's four casinos that offer 350 table games, high stakes bingo, and over 6,600 slot machines. The table games include Baccarat, Blackjack, Craps, Keno, Roulette, multiple types of Poker, and a Wheel of Fortune. Several gourmet restaurants, bars, cafes, as well as a 4000-seat performance arena,

nightclub, and dance club, are all located on the premises. Foxwoods also features an arcade, banquet hall, live entertainment, valet parking, meeting and conference facilities, and two large hotels with amenities. The Foxwoods shopping arcade has 23 retail stores, boutiques, and gift shops. The entertainment complex includes more than 1,400 luxury hotel rooms and suites at the Great Cedar Hotel, the Two Trees Inn, and the Grand Pequot Tower. The casino is open year round 24 hours a day.

Foxwoods recently announced a \$99 million expansion that will include 120,000 square feet of additional gaming space, a 2,100 car parking garage, 7,500 square feet of food and beverage outlets, and 6,000 square feet of retail space. The project is expected to be completed in the summer of 2004. The tribe is also constructing two golf courses that will include a golf academy, a 50,000 square foot club house, and gold villas. The gold courses are expected to be completed in the spring of 2005.

It is estimated that annual visitations to Foxwoods have increased from 16.4 million in CY 1998 to 20.1 million in CY 2003. It is estimated that annual total revenues for Foxwoods has increased from approximately \$1.3 billion in CY 1998 to \$1.5 billion in CY 2003.

Mohegan Sun is located on a 240-acre site on the Mohegan Tribe's reservation adjacent to Uncasville, Connecticut. It is directly accessible from Interstate 395 and Route 2A. Mohegan Sun opened on October 12, 1996 and is now the second largest casino in the country following a successful expansion known as Project Sunburst. Mohegan Sun has 295,000 square feet of gaming space in two casinos - the Casino of the Earth (176,500 sq. ft.) and the Casino of the Sky (119,000 sq. ft.). Mohegan's two gaming facilities have nearly 6,200 slot machines and 241 table games that include various types of poker, roulette, baccarat, black jack, and craps, among others. Mohegan Sun has 33 restaurants, cafes, and other food outlets, 9 lounges and bars, and 31 retail and specialty shops. Mohegan Sun also has a 1,200 room luxury hotel with 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. It has parking for 13,000 automobiles, valet parking, an area for large vehicles 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.

It is estimated that annual visitations Mohegan Sun have increased from 7.3 million in CY 1998 to 14.6 million in CY 2003. It is estimated that annual total revenues for Mohegan Sun increased from approximately \$633 million in CY 1998 to \$1.2 billion in CY 2003.

METHODOLOGY

The patron origin analysis was conducted on five different days: Thursday, February 11, 1999 from 9:00 am through Monday, February 15, 1999 to 9:00 pm.¹ 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 1,000 automobile license plates were taken each day during the five-day observation period at both locations. This sample was distributed across the day by counting at least 250 license plates 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 Foxwood's and Mohegan's patrons originating in various states, it is assumed that traffic flows and patron origins are constant, on average, during similar times of the day and on similar types of days. Thus, sampling counts are extrapolated on a daily basis for each day of the week during a 365-day year. 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), Memorial Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, and Christmas Day.² 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 Canada. Vehicles from other states are classified as Other. It is assumed that all vehicles originate in their state of registration as determined by license plate identifications.

The Center for Policy Analysis also estimated the percentage of tour buses originating in the states of Massachusetts, Rhode Island, Connecticut, Vermont, New Hampshire, Maine, New York, and Canada. Tour buses from other states were classified as Other. Because the majority of buses remain in the lot for an extended period of time, sample counts of the tour buses were taken on a less frequent basis to avoid double counting. At least one count per day was taken of the tour buses parked at Foxwood's Norwich, Connecticut bus area and at Mohegan Sun's parking lot. It is

¹ Variations of patron origin analysis (LVCVA 2001, Meyer-Arendt 1998, Carstensen et al. 2000), including license plate counts (Whelan 1996, Ryan 1999) have been used in a number of locales to ascertain the geographic and even demographic profile of casino visitors. The methodology employed in this study has also been validated by academic peer review, see Dense and Barrow (2003).

² The only holiday that fell on weekend days were treated as weekend days. In 1999, this includes Independence Day.

assumed that all buses originate in their state of registration as determined by license plate identifications.

PATRON ORIGINS

Using the sampling methodology described above, research staff from the Center for Policy Analysis surveyed 6,876 private automobiles and 201 tour buses over a five-day period at Foxwoods and 6,517 private automobiles and 183 tour buses during the same period at Mohegan Sun. The day to day results and an unweighted summary of the sampling counts are included in Appendix A (Foxwoods) and Appendix B (Mohegan). Based on these samples, it is estimated that 90 percent of both facilities' visitors arrive by private automobile, while the remaining 10 percent arrive by tour bus. In Appendices A and B, the unweighted summaries are broken down by state of origin, type of transportation (i.e., private automobile or bus), and type of day (e.g., weekday, weekend, or holiday). The unweighted percentages for patron origins are then weighted to account for the type of transportation and the type of day on the basis of the following formula:

$$\begin{aligned} \text{Adjusted State Percentage for Weekdays} &= [(\text{Car Weekday Percentage} * .688) * .90] \\ &\quad + [(\text{Bus Weekday Percentage} * .688) * .10] \\ \text{Adjusted State Percentage for Weekends} &= [(\text{Car Weekend Percentage} * .285) * .90] \\ &\quad + [(\text{Bus Weekday Percentage} * .285) * .10] \\ \text{Adjusted State Percentage for Holidays} &= [(\text{Car Weekday Percentage} * .027) * .90] \\ &\quad + [(\text{Bus Weekday Percentage} * .027) * .10]^3 \end{aligned}$$

The weighted estimates for private automobiles and tour buses were then translated from percentages of vehicles to percentages of patrons based on field observations that facility attendance during weekends and holidays was approximately double that of the weekdays. Thus, the weighted estimates for private automobiles and tour buses were translated into percentages of patrons using the formula:

$$\text{Percent Patrons} = [(\text{Weekend}\% * 2.1) + (\text{Holiday}\% * 2.1)] + \text{Weekday}\% / 2$$

The total weighted estimates, including both types of transportation, indicate that Foxwood's and Mohegan's patrons originate from the following states:⁴

³ The adjustment factors of .688, .285, and .027 are the percentage of weekdays, weekend days, and holidays, respectively, in the 1999 calendar year based on the definitions in the methodology. The adjustment factors of .90 and .10 are the estimated percentage of patrons arriving by car and bus.

Estimated Patron Origins by State: Foxwoods and Mohegan, 1999

State	Foxwoods	Mohegan
Massachusetts	36.0%	22.8%
Connecticut	28.3%	46.0%
Rhode Island	13.3%	8.0%
New Hampshire	3.0%	1.8%
Maine	1.5%	0.8%
Vermont	0.7%	0.4%
New York	12.0%	15.6%
Canada	0.1%	0.1%
Other	5.2%	4.5%
Total	100.0%	100.0%

Source: Center for Policy Analysis

Margin of Error: The statistical margin of error for the Foxwoods and Mohegan survey is +/- < 1% (plus or minus less than 1%).

These results reaffirm an earlier (October 1995) patron origin analysis by the Center for Policy Analysis, which used the same methodology to estimate patron origins at Foxwoods:

Patron Origins at Foxwoods: 1995 and 1999

	October 1995	February 1999
Massachusetts	33.04	35.96
Connecticut	29.04	28.32
Rhode Island	14.30	13.34
New York	10.76	11.96
Other	12.85	10.41
	99.99	99.99

Source: Center for Policy Analysis

Note: The statistical margin of error for the 1995 Foxwoods survey is +/- < 1% (plus or minus less than 1%).

ESTIMATED EXPENDITURES BY MASSACHUSETTS PATRONS

Native American casinos are not ordinarily required to publish financial information or other data about their operations. However, the compacts between the State of Connecticut and the Pequot and Mohegan Tribes requires them to pay 25% of slot revenues to the state in exchange for exclusive rights to operate slot machines. The slot revenues received by the state from Foxwoods and Mohegan Sun are a state public record, while more detailed information about Mohegan Sun's revenues are reported to

the U.S. Securities & Exchange Commission on Form 10-K.⁵ In Calendar Year 2003, Foxwoods paid \$197,930,067 to the State of Connecticut compared to \$170,033,845 in CY 1998. Mohegan Sun paid \$198,468,407 to the State of Connecticut in CY 2003 compared to \$106,154,735 in CY 1998.

The percentage of slot revenues paid to the state provide a firm basis for calculating each casino's annual win on slot machines, since it is known to be 25% of the total slot win. This ratio yields slot revenues (win) for Foxwoods of \$791,720,268 in CY 2003 compared to \$680,135,380 in CY 1998. Slot revenues (win) for Mohegan Sun were \$793,873,627 in CY 2003 compared to \$424,618,940 in CY 1998. In addition, national surveys and micro-level economic impact assessments of casino activity in the United States consistently document that slot revenues account for 67% to 70% of total gross gaming revenues. This ratio yields Calendar Year 2003 gross gaming revenues for Foxwoods of approximately \$1,124,242,781 compared to \$965,792,240 in CY 1998. Mohegan Sun's estimated gross gaming revenues are based on ratios derived from its FY 2003 SEC Form 10-K filing. Mohegan Sun's estimated gross gaming revenues for CY 2003 are \$1,127,300,550 compared to \$602,958,895 in CY 1998.

Finally, three previous economic impact assessments of Foxwoods Resort 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. The three studies include proprietary data on the casino's operations that make it possible to estimate the casino's non-gaming revenues from hotels, restaurants, shops, and attractions. Non-gaming revenues for Foxwoods are calculated on the conservative assumption that they equal 26% of gross gaming revenues, even though previous studies indicate that such revenues may be as high as 35% of gross gaming revenues. Based on its FY 2003 SEC Form 10-K filing, the non-gaming revenues for Mohegan Sun are known to be 17% of total revenues (or 21% of gross gaming revenues). These ratios yield Calendar Year 2003 total revenues of approximately \$1.5 billion for Foxwoods and \$1.2 billion for Mohegan Sun.⁶

If Massachusetts patrons account for an equal or average per capita share of the two facilities' annual total revenues, which is a highly conservative assumption, then it is estimated that residents of Massachusetts spent approximately \$829,000,000 in CY

⁵ Mohegan Sun financed much of its recent expansion (Project Sunburst) with a public bond offering, which means it must submit annual Form 10-K to the U.S. Securities & Exchange Commission in contrast to Foxwoods, which has financed its expansion with internal revenues.

⁶ These estimates are consistent with previous studies by 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).

2003 at Connecticut's two Native American casinos compared to \$620,000,000 in CY 1998.⁷

It is estimated that Rhode Island residents spent approximately \$301,000,000 in CY 2003 at Connecticut's two Native American casinos compared to \$226,000,000 in CY 1998.

Based on these figures, it is estimated that Massachusetts residents indirectly contributed more than \$116 million to the Connecticut state treasury as a result of gaming activity in that state, while Rhode Island residents contributed nearly \$42 million to the Connecticut state treasury.

⁷ A review of the Center for Policy Analysis methodology 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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APPENDIX A

	Slot Win	Other Gaming	NonGaming	Total	Contribution to CT
FOXWOODS	\$791,720,266	\$332,522,512	\$393,484,972	\$1,517,727,750	\$197,930,067
MA	\$285,019,296	\$119,708,104	\$141,654,590	\$546,381,990	\$71,254,824
RI	\$105,298,795	\$44,225,494	\$52,333,501	\$201,857,791	\$26,324,699
CT	\$224,056,835	\$94,103,871	\$111,356,247	\$429,516,953	\$56,014,209
NH	\$23,751,608	\$9,975,675	\$11,804,549	\$45,531,833	\$5,937,902
ME	\$11,875,804	\$4,987,838	\$5,902,275	\$22,765,916	\$2,968,951
VT	\$5,542,042	\$2,327,658	\$2,754,395	\$10,624,094	\$1,385,510
NY	\$95,006,432	\$39,902,701	\$47,218,197	\$182,127,330	\$23,751,608
OTHER	\$41,961,174	\$17,623,693	\$20,854,704	\$80,439,571	\$10,490,294
MOHEGAN SUN	\$793,873,627	\$333,426,923	\$112,730,055	\$1,240,030,605	\$198,468,407
MA	\$181,003,187	\$76,021,338	\$25,702,453	\$282,726,978	\$45,250,797
RI	\$63,509,890	\$26,674,154	\$9,018,404	\$99,202,448	\$15,877,473
CT	\$365,181,868	\$153,376,385	\$51,855,825	\$570,414,078	\$91,295,467
NH	\$14,289,725	\$6,001,685	\$2,029,141	\$22,320,551	\$3,572,431
ME	\$6,350,989	\$2,667,415	\$901,840	\$9,920,245	\$1,587,747
VT	\$3,175,495	\$1,333,708	\$450,920	\$4,960,122	\$793,874
NY	\$123,844,286	\$52,014,600	\$17,585,889	\$193,444,774	\$30,961,071
OTHER	\$36,518,187	\$15,337,638	\$5,185,583	\$57,041,408	\$9,129,547
TOTAL	\$1,585,593,893	\$665,949,435	\$506,215,027	\$2,757,758,355	\$396,398,473
MA	\$466,022,483	\$195,729,443	\$167,357,042	\$829,108,968	\$116,505,621
RI	\$168,808,686	\$70,899,648	\$61,351,906	\$301,060,239	\$42,202,171
CT	\$589,238,704	\$247,480,255	\$163,212,072	\$999,931,032	\$147,309,676
NH	\$38,041,333	\$15,977,360	\$13,833,690	\$67,852,383	\$9,510,333
ME	\$18,226,793	\$7,655,253	\$6,804,115	\$32,686,161	\$4,556,698
VT	\$8,717,536	\$3,661,365	\$3,205,315	\$15,584,217	\$2,179,384
NY	\$218,850,718	\$91,917,301	\$64,804,085	\$375,572,104	\$54,712,679
OTHER	\$78,479,361	\$32,961,332	\$26,040,286	\$137,480,979	\$19,619,840