

**John F. Kennedy School of Government
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**Public Policy Analysis of Indian Gaming in
Massachusetts**

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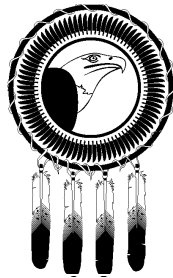
May 2002

RWP02-019

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PUBLIC POLICY ANALYSIS OF INDIAN GAMING IN MASSACHUSETTS

*A REPORT TO THE GOVERNMENT OF THE
WAMPANOAG TRIBE OF GAY HEAD (AQUINNAH)*



THE HARVARD PROJECT ON AMERICAN INDIAN ECONOMIC DEVELOPMENT

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MAY 13, 2002

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The authors received no compensation for any of their work on this study. Services for collection of some of the data employed in this study were provided by Lexecon Inc., with financial support to Lexecon from the government of the Wampanoag Tribe of Gay Head (Aquinnah). Any errors or omissions are the responsibility of the authors.

I. INTRODUCTION AND SUMMARY OF FINDINGS

Representative Daniel E. Bosley has recently recirculated his 1997 memorandum reporting the results of his investigation into the public policy of casino gaming in Massachusetts, particularly of Indian gaming.¹ The memorandum raises many important considerations regarding the potential impacts on the State of Massachusetts of an expansion of gambling offerings within the state. We have undertaken a systematic review of the relevant literature on the impacts of Indian gaming, including a study by Deloitte & Touche describing a Wampanoag casino proposal,² to assess the extent to which Representative Bosley's memorandum appropriately assesses these impacts. We conclude that while the 1997 Bosley Memorandum asked a number of relevant and important public policy questions, the evidence available in 2002 no longer supports its conclusions.

Though it raised important questions that are worthy of policymaker's continued attention, the Bosley Memorandum has been superseded by two national commission reviews of gaming³ and five-years' worth of social science research on gaming.⁴ As we show below, the best-available research and evidence indicates the Bosley Memorandum leads policymakers to exactly the wrong conclusion. Indian gaming in Massachusetts likely offers very substantial net benefits. Specifically, Indian gaming in Massachusetts is poised to:

- **Recapture** three-quarters of a billion dollars in out-of-state spending by Massachusetts residents;

¹ Bosley, Daniel E., *Memorandum to Speaker Finneran Re: Gaming Proposals*, April 28, 1997, available at www.mma.org/news/news_files/state_budget_news/budget_news_files/casino.txt, accessed May 6, 2002.

² Deloitte & Touche, *A Massachusetts Economic Development Initiative: Impacts Resulting from the Development of a Gaming and Entertainment Center in Southeastern Massachusetts, Estimates of Gaming Revenue and Impact on Lottery*, July 12, 2002.

³ The National Gambling Impact Study Commission, and the National Public Sector Gaming Study Commission had both completed their reports by 2000. Public Sector Gaming Study Commission, *Gambling Policy and the Role of the State: An Assessment of America's Gambling Industry and the Rights and Responsibilities of State Governments*, Final Report of the Public Sector Gaming Study Commission (Tallahassee, FL: Florida Institute of Government, Florida State University), March 2000. *Final Report of the National Gambling Impact Study Commission*, June 1999, govinfo.library.unt.edu/ngisc/reports/fullrpt.html, accessed May 7, 2002. In addition, there have been national reviews of gambling in Australia, New Zealand, and the United Kingdom.

⁴ See, e.g., Gerstein, et al., *Gambling Impact and Behavior Study: Report to the National Gambling Impact Study Commission*, National Opinion Research Center (NORC), University of Chicago, April 1, 1999; *Pathological Gambling: A Critical Review*, National Research, National Academy Press, April, 1999; and Taylor, Jonathan B., Matthew B. Krepps, and Patrick Wang, "The National Evidence on the Socioeconomic Impacts of American Indian Gaming on Non-Indian Communities," forthcoming in the *American Behavioral Scientist* special issue on American Indian Gaming.

- **Attract** spending by out-of-state residents—particularly from northern New England—that currently goes to Connecticut; and
- **Develop** depressed regions of the Massachusetts economy.

The evidence suggests that these gains to the economy of Massachusetts are unlikely to be outweighed by social costs. Recent social science research indicates that pathological gambling rates in the general population do not climb in parallel with exposure to gambling opportunities. Moreover, social science research indicates that resulting net social and economic *gains* are likely in the context of the below-average economic conditions found in southeastern Massachusetts (where new gaming operations are most likely to be established).

Associated gaming impacts, such as burdens created by additional traffic, infrastructure, and law enforcement needs and expanded regulatory costs are properly the concern of policymakers, as the Bosley Memorandum pointed out.⁵ Nonetheless, the available evidence indicates that these costs will be substantially less than the benefits provided by an Indian casino in Massachusetts. Thus, in contrast to the conclusions of the Bosley Memorandum, the appropriate public policy questions ought to be focused on *how* gaming proceeds not *whether* Massachusetts develops a casino industry.

II. SOCIOECONOMIC IMPACT ANALYSIS OF GAMING

A. ISSUES FOR ANALYSIS

The regional net impact of a gaming facility is determined by a number of economic variables:

- Recapture of out-of-state spending and attraction of out-of-state customers;
- Substitution away from other in-state economic activity;
- Employment and economic development;
- Social and community change; and
- Changes in government activity and regulation.

B. RECAPTURE AND ATTRACTION OF OUT-OF-STATE SPENDING

The geography of the gaming marketplace is essential to the analysis of impacts. Unlike movie theaters or other entertainment venues, whose location is determined largely by supply and demand forces, the location of gaming facilities has been tightly constrained by regulation and legislation. State and federal law has resulted in gaming

⁵ Bosley Memorandum, *op cit.*, at Sec. IV.

facilities that are near state or international borders (*e.g.*, on mid-continent rivers and in Detroit, MI), in limited municipal areas (*e.g.*, Atlantic City, NJ, and Deadwood, SD), and on Indian reservations. Indeed, two of the significant motivations in structuring states' gaming policies have been the attraction of out-of-state tourists (*i.e.*, *increasing exports*)⁶ and the retention of in-state consumers who would otherwise go out of state for gambling entertainment (*i.e.*, *substituting for imports*).⁷

Another reason why geography matters so much in gaming analysis is that slot machines and table games—in and of themselves—do not present casino operators with substantial opportunities for differentiation. As entertainment products, they are essentially commodities. Thus, consumption of gambling tends to be motivated in large measure by the geographic convenience of options available to the consumer. True, people visit Las Vegas from all over the US. But in such non-destination markets as Iowa, Michigan, South Dakota, and Arizona, gambling consumption tends to follow patterns like the consumption of amusement, mall, and other quasi-commodity services—consumers go to the nearest one. As a result, most models of the casino industry start from geographic competition, and only then add other dimensions such as hotels, entertainment halls, and shopping areas.⁸

Recapture and Attraction in the Bosley Memorandum

The Bosley Memorandum dismissed the recapture argument for two basic reasons. First it argues that the proposed facility will be inadequately attractive to customers:

*Foxwoods is a destination resort...It is a tourism destination and the largest gaming resort in the world. No one in Massachusetts is suggesting to develop anything as elaborate. Therefore, Foxwoods will continue to attract visitors from Massachusetts.*⁹

⁶ Counterintuitively perhaps, an increase in out-of-state tourists into the state is counted as an *increase in exports*. In other words, gambling entertainment services are considered to be “exported” to out-of-state consumers, even though the tourists themselves actually come *into* the region of concern, *e.g.*, Massachusetts. Conversely, retaining Massachusetts tourists in-state when they would have gone out of state is considered to be *import substitution*, as in-state tourists forgo travel to out-of-state destinations.

⁷ Michigan, for example, passed a referendum, Proposal E, in November, 1996, that authorized casinos in cities over 800,000 in population within “100 miles of any other state or country in which gaming is permitted.” “Proposal E Ballot Language,” as it appeared on Michigan’s November 5, 1996, general election ballot, Michigan Gaming Control Board, www.michigan.gov/mgcb/1,1607,7-120-1382_1450-12939--,00.html, accessed March 24, 2002. The ostensible intent was to retain in Michigan the roughly \$1,000,000 per day that was estimated to leave for Casino Windsor just across the Detroit River in Ontario, Canada. Eadington, William R., “Economic Development and the Introduction of Casinos: Myths and Realities,” *NAGS '95: High Stakes in the Nineties, Sixth Annual Conference, Fremantle*, at 5.

⁸ In the jargon of the industry these are called “gravity” models since the propensity to attend a facility is an exponentially declining function of distance from it.

⁹ Bosley Memorandum, *op cit.*, at Sec. V.

Second, the Bosley Memorandum dismissed estimates of the total spent by Massachusetts residents at out-of-state casinos as “not very scientific”:

In one such study, a professor went to Foxwoods and counted cars in the parking lot; from this he determined that forty percent of the patrons at Foxwoods were Massachusetts residents. This does not tell us the income levels or spending patterns of the car owners. It doesn't tell us the age or demographics of the drivers or even how many people were in each car... We do not know if we will recapture a significant portion of the Massachusetts money that is spent in Connecticut.¹⁰

The Bosley Memorandum did not address the attraction of out-of-state customers to Massachusetts (e.g., from Maine and New Hampshire).¹¹

The Economic Evidence on Retention and Attraction

These arguments do not square with the facts as they stand today. First, the Wampanoag Tribe has every incentive to build as competitive facility as they can. Indeed, the Tribe is currently proposing a facility on par with Foxwoods and Mohegan Sun. The proposed facility entails a multi-dimensional entertainment complex, including 180,000 square feet of gaming space, 1,200 hotel rooms, 6,600 square feet of retail space, 32,000 square feet of restaurant and lounge space, and 20,000 square feet of exhibition and public space. Thus, the facility will not just compete on geographic terms, but on the amenities it offers as well.¹²

Moreover, a Wampanoag facility could potentially recapture substantial patronage. Figure 1 shows that a very substantial proportion of the Massachusetts population older than 21 is closer to a hypothetically-located Wampanoag facility than to a Connecticut Indian facility of similar size and with similar attributes.¹³ Looking at “crow-flies” distances of 50 miles, over three million adult Massachusetts residents are closer to the Wampanoag location than to the Connecticut casinos. Consequently, the

¹⁰ Bosley Memorandum, *op cit.*, at Sec. V.

¹¹ The Bosley Memorandum also asserts (albeit without foundation) that the state economies are “quite different” and therefore the task of determining whether recapture will be effective is too difficult. Bosley Memorandum, *op cit.*, at Sec. IV.

¹² See Deloitte & Touche, at 34, for comparison to Foxwoods and Mohegan Sun.

¹³ The Tribe proposes to build a casino in Plymouth and Bristol counties. The location plotted in Figure 1 is the geometric centroid of the combined county region. It also should be noted that Rhode Island is home to a jai-alai facility and a horse track, each of which also offer video lottery terminals. These facilities compete, of course, over geography, yet they do not have either the scale or scope of activities offered by Foxwoods, Mohegan Sun, or a proposed Wampanoag facility. Given their size and relatively central location between Southeastern Massachusetts and Southeastern Connecticut, they are presumed not to compete heavily for patrons from, e.g., metropolitan Boston.

Wampanoag facility portends significant economic activity for the Southeast region of the state.

Figure 1 also indicates that a southeast Massachusetts casino has the potential to intercept Connecticut-destined patrons from Rhode Island, New Hampshire, and Maine. On a 100-mile basis, 1.2 million residents of those two states are closer to a Wampanoag casino. While the potential to attract out-of-state customers was not covered in the Bosley Memorandum, it represents a net benefit to the Massachusetts economy and should be considered.

Table 1
Sample of Estimates of Massachusetts Patronage of Connecticut Casinos
millions of nominal dollars

Study	MA Patronage	Source of MA Data
Bosley Memorandum	40%	License Plates
WEFA Group	<55%*	Patron Survey & License Plates
UMass Dartmouth	23, 36%**	Patron Survey
UMass Dartmouth	33%	Patron Survey
Univ. of Connecticut	34%	Patron Survey

* 55% represents the total estimated non-Connecticut patronage.

** For Mohegan Sun and Foxwoods, respectively.

Sources: Bosley Memorandum, at Sec. V; WEFA, *A Study Concerning the Effects of Legalized Gambling on the Citizens of the State of Connecticut*, 6/97, at 2-20; Center for Policy Analysis, UMass, Dartmouth, *Patron Origin Analysis: Foxwoods Resort Casino & Mohegan Sun Casino*, 2/99, at i.; Center for Policy Analysis, UMass Dartmouth, *Patron Origination Analysis: Foxwoods Resort Casino*, 10/95, at 3; Connecticut Center for Economic Analysis, University of Connecticut, *The Economic Impact of the Mashantucket Pequot Tribal Nation Operations on Connecticut*, at 27.

Table 1 addresses the issue of whether Massachusetts residents make up a significant percentage of the patronage of Connecticut casinos.¹⁵ According to Table 1, roughly one-third of the patronage of the Connecticut casinos originates from Massachusetts. Taking the most recent full fiscal year of combined slot revenues for the Connecticut facilities (\$1.3 billion in FY 00-01)¹⁶ and working with conservative

¹⁴ Of course, crow-flies distances are not the only factor entering the consumer's decision to patronize an in-state or out-of-state casino, but if the facilities are similar in size and scope, travel time will play a big role in the decision.

¹⁵ See, e.g., Sec. V. of the Bosley Memorandum, *op cit.*, expressing skepticism of estimates of MA patronage at Connecticut casinos.

¹⁶ Connecticut Department of Special Revenue, "Foxwoods Casino, Schedule of Selected Video Facsimile/Slot Machine Data," www.dosr.state.ct.us/PDF%20Folder/FoxH0302.pdf, at 3, accessed May 7, 2002; Connecticut Department of Special Revenue, "Mohegan Sun Casino, Schedule of Selected Video Facsimile/Slot Machine Data," www.dosr.state.ct.us/PDF%20Folder/MohH0302.pdf, at 2, accessed May 7, 2002.

assumptions, the Massachusetts share of total Connecticut casino revenue available for recapture is at least three-quarters of a billion dollars annually.¹⁷

Working with standard casino modelling techniques rather than from survey data, Deloitte & Touche concluded that Massachusetts residents leave behind nearly \$820 million annually at facilities in both Connecticut and Rhode Island. In addition, if a casino were built in Massachusetts, Deloitte & Touche estimated \$840 million could be recaptured from gaming facilities in neighboring states.¹⁸ Thus, in spite of the Bosley Memorandum's assertion that the research is "not very scientific," a range of appropriate analytical methods and data sources seem to converge on the conclusion that the potential recapture benefit of the Wampanoag casino is close to three quarters of a billion dollars, if not more.

Finally, all of the foregoing is consistent with the existence of a well-developed bus transportation network that caters to Connecticut-bound Massachusetts residents all across the state. Forty-nine Massachusetts cities, towns and other locations have daily bus service to the Connecticut casinos;¹⁹ fifteen more have at least weekly service;²⁰ and five more can readily schedule charters.²¹

¹⁷ Assuming slot revenue is 70% of total gaming revenue and that gaming revenue is 85% of total facility revenue, yields \$737 billion. Using the still-reasonable figures of 66% and 83%, respectively, yields \$800 billion. Note 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 (Ryan, Timothy P., and Janet F. Speyer, "Appendix G—License Plate Survey," *Gaming in Louisiana: A Benefit/Cost Analysis*, prepared for the Louisiana Gaming Control Board, April 1999, at 40-41). Thus, the implication of the Bosley Memorandum that because we do not understand the spending pattern behind license plate surveys, we cannot have confidence that we can recapture all that one might expect is reversed. Even more might be recaptured than these calculations would indicate.

¹⁸ I.e., including Rhode Island facilities. Deloitte & Touche, *op cit.* at 37.

¹⁹ Amherst, Boston, Bridgewater, Brockton, Burlington, Buzzards Bay, Dedham, East Boston, Everett, Fairhaven, Fall River, Forest Hills, Foxboro, Framingham, Holyoke, Hyannis, Hyde Park, Kingston, Leominster, Lowell, Lynn, Malden, Medford, Middleboro, New Bedford, Newton, North Hampton, North Quincy, Peabody, Pembroke, Plymouth, Quincy, Revere, Rockland, Sagamore, Salem, Saugus, Six Flags NE, Somerset, Somerville, South Dennis, Springfield, Stoneham, Stoughton, Tauton, Wareham, Weymouth, Woburn, and Worcester. Personal communication with bus companies listed at www.foxwoods.com/by_bus.html; and www.mohegansun.com/visitingus/transit/mass.html, accessed May 6, 2002.

²⁰ Barnstable, Bourne, Chicopee, Falmouth, Greenfield, Harwich, Haverill, Mashpee, Newburyport, North Attleboro, Orleans, Pittsfield, Randolph, Wareham, and Watertown. Personal communication with bus companies listed at www.foxwoods.com/by_bus.html; and www.mohegansun.com/visitingus/transit/mass.html, accessed May 6, 2002.

²¹ Adams, Lee, North Adams, South Deerfield, and Williamstown. Personal communication with bus companies listed at www.foxwoods.com/by_bus.html; and www.mohegansun.com/visitingus/transit/mass.html, accessed May 6, 2002.

C. SUBSTITUTION AWAY FROM OTHER ECONOMIC ACTIVITY

There are patrons at a gaming facility who, but for the facility, might have spent their income on other in-state opportunities. Of particular concern in the Bosley Memorandum is the diversion of consumer spending from the lottery to a Massachusetts casino. The Massachusetts lottery is superlative in many respects. It is:

- #1 in sales as a percent of state personal income;²²
- #1 in sales per capita for states without Video Lottery Terminals (VLTs);²³ and
- #1 in low cost of sales generation.²⁴

Thus, there is a reasonable concern that the advent of casino gambling in Massachusetts would cannibalize lottery gambling.

Analyses such as the Deloitte & Touche study report mixed results. In some cases casino competition has been associated with declines in lottery revenue; in other cases, no change; and in others, increases. Even so, the change in *total* gaming revenue has been net positive in all cases after the introduction of a casino.²⁵ Unfortunately, little systematic research exists that can definitively answer the question: But for the advent of casinos in various states, how would the state lotteries have fared? Because lotteries tend to churn through games in order to keep interest piqued, any analysis of this question faces the problem of determining whether observed new lottery games and their associated marketing efforts are part of the natural rate of churn or a response to new competition from casinos.

Nonetheless, there are reasons to expect that the effect of casino gaming on the Massachusetts lottery is likely to be modest. First, the economics of product substitution suggest that while there are some attributes that instant tickets, for example, have in common with slot machines (*i.e.*, low bets and rapid resolution of the bet), consumers differentiate their consumption of a lottery product from their consumption of a casino product. Intuitively, a ticket picked up at a convenience store with a gallon of milk, does not compete very much in a consumer's mind with dinner, a show, and an evening of blackjack.

²² McQueen, Patricia A., "Lottery Efficiency Study: State of the State Lotteries," April 2001, www.gemcommunications.com/WGCE/Publications/IGWB_magazine/Archives/2001/apr/main.htm, accessed May 7, 2002.

²³ North American Association of State and Provincial Lotteries, "Lotteries Ranked by FY 2000 Per Capita Sales," www.naspl.org/rankpercap.html, accessed May 7, 2002.

²⁴ See footnote 22.

²⁵ See Deloitte & Touche, at 39; and Dense, Jeffrey, *et al.*, *Casino Gaming and State Lotteries: A Fiscal Impact Study*, Center for Policy Analysis University of Massachusetts Dartmouth, April 1999, at ii.

Second, even if there is some competition between these two products in consumers' decision-making, the availability of casino gaming in Connecticut and the substantial patronage of it by Massachusetts residents renders any effect on the Massachusetts lottery minimal. Current lottery growth (which has been positive in Massachusetts through the introduction and expansion of Foxwoods and Mohegan Sun)²⁶ already reflects the patronage of Massachusetts residents at casinos. Whatever competition is expected has already been reflected in the lottery outcomes to a large degree.

D. UNEMPLOYMENT AND ECONOMIC DEVELOPMENT

A rise in within-state economic activity brought either by recapture of or by attraction of out-of-state spending brings with it greater demand for labor. Depending on regional labor market conditions, this additional demand will produce net new jobs (*i.e.*, decreased unemployment) and/or increased incomes.²⁷ All of these effects result in positive economic impacts for the state. Rising incomes and greater employment generate more household spending, greater tax revenue, and lower public assistance burdens.

In addition, increases in employment also bring numerous other social and health benefits as the harmful consequences of unemployment are unwound:

- Unemployment is associated with increases in mortality, particularly from suicide and lung cancer.
- Unemployment is associated with higher incidences of suicide attempts, depression, and anxiety.
- The onset of unemployment is associated with greater tobacco and alcohol use.
- A higher proportion of families with unemployed adults are reported as having greater risk of domestic violence and divorce.²⁸

Thus, economic development can translate to a host of quality of life benefits.

²⁶ See, *e.g.*, Deloitte & Touche, at 42.

²⁷ And in communities facing severe economic deprivation prior to a casino introduction, this additional labor demand can also increase the number of people actively in the labor force, as new opportunities draw chronically discouraged workers heretofore not seeking employment into the labor pool.

²⁸ See, *e.g.*, Wilson, S.H., and G.M. Walker, "Unemployment and Health: a Review," *Public Health* (1993), Vol. 137, at 153-162; Hibbard, Judith H., and Clyde R. Pope, "Employment Status, Employment Characteristics, and Women's Health," *Women & Health*, (1985) Vol. 10(1), at 59-79; and Graetz, Brian, "Health Consequences of Employment and Unemployment: Longitudinal Evidence for Young Men and Women," *Soc. Sci. Med.* (1993), Vol. 36, No. 6, at 715-724.

Impoverished Regions and Gaming in the Bosley Memorandum

The Bosley Memorandum observed that introducing a casino into an impoverished region could have offsetting effects. On the one hand, it notes that “the casino gambling community is made up in large part by the destination gambler.”²⁹ To the extent this is the case, dollars brought in from outside the destination region would raise employment and/or incomes. On the other hand, the Bosley Memorandum “question[s] the wisdom of placing casinos in some of the most impoverished places in the state” presumably because the poor may disproportionately patronize the casino due to ease of access.³⁰ Unfortunately, at the time of the writing of the Bosley Memorandum there was little systematic evidence that could speak to which of these effects prevailed generally.

Evidence on Regional Employment and Development Impacts

Research on Indian-specific gaming effects indicates that Indian casinos have a net positive effect on surrounding non-Indian communities.³¹ That research is consistent with destination effects (*i.e.*, the benefit of bringing revenues in from more prosperous regions) dominating the effects of cannibalizing existing businesses in the economically depressed region. In the statistical sample used, communities that witnessed an Indian casino introduction started with lower incomes than their counterparts and narrowed the income difference over the period where casinos were introduced (see further discussion at note 42 below).

This evidence suggests that the net socioeconomic benefits of a Wampanoag casino will be positive, as Bristol and Plymouth counties display below-average incomes within the state. Bristol County’s 2000 per capita personal income was \$28,726, placing it 11th out of 14 Massachusetts counties and well below the state and national averages of \$37,704 and \$29,469, respectively.³² Plymouth County’s slightly higher per capita personal income of \$33,339 placed it closer to (albeit still below) the state average and above the national average. Its average income placed it 8th out of the 14 Massachusetts counties.³³

Regarding the Bosley Memorandum’s observation that casino gambling may depend disproportionately on lower income individuals, data suggests that this is not the case. Results of a 1999 Gallup Poll Social Audit Survey on Gambling in America indicate that lower-income Americans (earning less than \$25,000) are less likely to report having gambled in the past year (63%) than those earning upwards of \$75,000 annually

²⁹ Bosley Memorandum, *op cit.*, at Sec. V.

³⁰ *Ibid.*

³¹ Taylor, Jonathan B., Matthew B. Krepps, and Patrick Wang, “The National Evidence on the Socioeconomic Impacts of American Indian Gaming on Non-Indian Communities,” forthcoming in the *American Behavioral Scientist* special issue on American Indian Gaming.

³² BEARFACTS, Regional Economic Information System, Bureau of Economic Analysis, www.bea.doc.gov/bea/regional/bearfacts/bf1/25/b125005.htm, accessed May 7, 2002.

³³ *Ibid.*

(75%). Similarly, 72% of college graduates reported past-year gambling compared to 61% of those that did not complete high school.³⁴

The conclusions of national studies that destination effects will bring economic health to depressed regions are consistent with the findings of a Massachusetts-specific study on the subject. The Center for Policy Analysis at the University of Massachusetts, Dartmouth Campus studied the possible impacts of a trio of casinos in Massachusetts. Applying national casino employee survey data on welfare and unemployment status prior to gaming employment, they estimated that statewide employment due to casino operations would remove approximately 1,374 persons from the state's Temporary Assistance to Needy Families (TANF) roll. In addition, the transition of these persons into the labor force would save the state approximately \$8.7 million annually.³⁵

E. GOVERNMENT ACTIVITY AND REGULATION

It is reasonable to expect that the increases in economic activity may place greater demands on public services and infrastructure. As tourists are attracted to and retained in the region, traffic congestion might develop where there might not have been any prior to the opening of a casino. As patrons congregate in large numbers, additional police, fire, and ambulance services may be required. And of course, a new gaming facility requires new regulatory, security, and other types of oversight. None of this activity, though, is cause for rejecting a facility proposal; indeed the new demands on government services are a sign of the economic vitality that both the tribe and the state seek to create. Instead, the new burdens on government infrastructure are consequences to be addressed by both the tribal and state government together. The Indian Gaming Regulatory Act (IGRA) provides a framework for the tribe and the state to address public policy issues of mutual concern via the negotiation of a compact that specifies how a tribe and a state will proceed together in managing these burdens.

IGRA specifies that the tribes and the federal government are mandatory participants in the regulatory process and that the state may participate at the level it and the tribe negotiate together. The tribes bear the primary burden of regulation and must establish independent gaming commissions to oversee the actual operations of the casino. The federal government—via the National Indian Gaming Commission and other agencies like the FBI—has responsibility for overseeing tribal gaming ordinances, the licensing of Indian gaming employees, contracts with management entities, and other attributes of the business. IGRA also allows the states to address potential consequences on the states by allowing—to varying degrees, depending on the states' choices and the games offered by tribes—additional oversight of Indian gaming operations. In some compact negotiations, states have chosen to regulate Indian gaming and to insist on

³⁴ The Gallup Organization. "Gambling in America." www.gallup.com/poll/specialReports/socialAudits/Gamblingrelease.asp, accessed May 7, 2002.

³⁵ Barrow, Clyde W. and David R. Borges, *The Economic and Fiscal Impact of Three Casino and Entertainment Resorts in Massachusetts: Salisbury Beach, Hampden, and Bristol Counties*, April, 1999, Center for Policy Analysis, University of Massachusetts Dartmouth, at 34. Note that these impacts are not for the single Wampanoag casino proposal under discussion in 2002.

reimbursement for their efforts by tribes. In others, the state has been content to simply require that the tribes prominently display signs saying that the state does not regulate the casino.³⁶

Thus, it is quite reasonable for the state to negotiate with the Wampanoag Tribe such that the facility operates on a pay-as-it-goes basis where state regulatory activities, infrastructure costs, and local public service burdens are concerned. And in contrast to the declaration of the Bosley Memorandum that the gaming regulatory structures are “quite expensive to maintain,”³⁷ the State of Massachusetts could structure its relationship to the tribe and the facility in such a way that it would bear no costs. Because the state can participate through the IGRA compacting process in designing the arrangement under which gaming can proceed, it can minimize the risk to itself that it will bear costs associated with tribal gaming operations.

F. SOCIAL CHANGE

The layman’s intuition of problem and pathological gambling holds that as casinos are introduced, the incidence of problem and pathological gambling will increase. Of course, in Southeast Massachusetts, this layman’s analysis begs the question: What counts as an *introduction*? As we have seen above, the Massachusetts lottery is at the top of its class, and Massachusetts residents patronize Connecticut casinos heavily. Thus, by this layman’s logic, Massachusetts residents have already been “introduced” to gambling, and gambling pathology *increases* will only be modest.

Even so, as appealing and simple as this layman’s intuition may be, the research by academic observers calls into question whether it is supported by the facts. At the broadest level, data from two national commission studies show that while wagering revenues increased 1600% and the gambling expenditure share of personal income doubled over the last 25 years, there was no appreciable change in the national lifetime gambling pathology rate of about 1%.³⁸ Other studies have corroborated this finding as well:

...in light of the large extent to which gambling has been legalized in America over the past few decades, the failure to find an obvious pattern of increasing prevalence of pathological gambling should raise serious doubts about just how likely the disorder is to be triggered by increasing opportunities to gamble.³⁹

³⁶ See, e.g., United States General Accounting Office, *Casino Gaming Regulation: Roles of Five States and the National Indian Gaming Commission*, May, 1998.

³⁷ Bosley Memorandum, *op cit.*, at Sec. IV.

³⁸ Gerstein, *et al*, *op cit.*, at 3,25; National Research Council, *op cit.*, at Exec-3.

³⁹ Public Sector Gaming Study Commission, *op cit.*, at 48. Also see, e.g., Abbott, Max Wenden, Maynard Michael Williams, and Rachel Ann Volberg, *Seven Years On: A follow-up study of frequent and problem gamblers living in the community, Report number two of the New Zealand Gambling Survey*, The Department of Internal Affairs, December 1999, at 7, 86.

Much of this pathological and problem gambling literature has focused on surveying the public and using those surveys to estimate prevalence rates and social costs.⁴⁰ Because of the challenges presented by those methods, recently social science research has turned to statistical techniques to determine if gambling creates social problems as evidenced in data on socioeconomic conditions. Rather than create estimates from the bottom up, these studies take a “top-down” look at communities near gambling establishments to determine if they exhibit any systematic difference from their counterparts not near casinos. A rigorous statistical examination chartered by the National Gambling Impact Study Commission (NGISC), for example, examined data on 32 indicators of socioeconomic health for 100 communities over 16 years. It showed substantial gains and no harm when comparing communities before and after gaming and when comparing communities that witnessed casino introductions with those that did not. Relative to their control group, communities within 50 miles of a casino introduction experienced:

- a 12% decline in unemployment (roughly a one point decline in the rate);
- a 13% decline in income derived from income maintenance programs;
- a 17% decline in income derived from unemployment insurance programs;
- a 3% decline in income derived from other transfer payment programs; and
- no decline in total per capita income despite declines in income derived from welfare programs.⁴¹

A further examination of these 100 non-Indian communities determined that those proximate to Indian casinos were economically worse off prior to the construction of casinos, and witnessed more substantial gains from casino introductions:

- non-Indian communities proximate to Indian casinos narrowed the income gap—total incomes rose;
- nonetheless, reductions in income from welfare programs were even more pronounced;
- no increases in social ills (*e.g.*, bankruptcy) were identified; and
- decreases in some crimes were identified.⁴²

⁴⁰ See, *e.g.*, Gerstein, *et al.*, *op. cit.*

⁴¹ There was also some shifting of incomes in sectors (hotel income rose while restaurant and bar income declined). Gerstein, *et al.*, *op. cit.*, at 70-71.

⁴² Taylor, *et al.*, *op. cit.*, at 2-27.

It seems that while more Americans have been exposed to gambling, they gamble no more than they used to. Between the national commission reviews—1975 and 1998—the proportion of Americans who had gambled at least once in their lives jumped from 68% to 86%. However, the number of those surveyed who had gambled in the last year only increased from 61% to 63%, in spite of increased availability of gambling opportunities. Together these findings suggest that while people are experimenting with gambling, this experimentation has not turned people into habitual or problem gamblers.⁴³ Others have suggested that the availability of gambling has little or no impact on problem or pathological gambling prevalence rates because the origins of gambling addiction are tangled with other addictive behaviors unrelated to gaming.⁴⁴

As for why “top-down” assessments of socioeconomic variables do not show any worsening of socioeconomic indicators associated with gaming introductions, it could be that the effects are too small to be distinguished or that social gains cancel out the losses.⁴⁵ This latter possibility may be particularly true for Indian gambling facilities located in lower-income regions: the attraction of new economic activity and the employment of welfare recipients, for example, would be expected to reduce crime, suicide rates, and other social pathology.⁴⁶

Predicting the rate of change in pathological gambling in Massachusetts attributable to the introduction of Indian casinos is beyond the scope of this report. However, we have no reason to believe that Massachusetts populations behave any differently from those in the US generally or in other studied countries. In other words, we do not expect that the advent of tribal gaming will precipitate a substantial net increase in the prevalence of problem gambling in Massachusetts and therefore in the social costs of gaming. This is not to say that gambling is without cost or that the consequences suffered by problem and pathological gamblers, their families, and their communities are insubstantial to those who bear them. Nonetheless, our task here is an assessment of gaming’s overall impact, and the evidence indicates Indian gaming is a net socioeconomic benefit to the state.

⁴³ Public Sector Gaming Study, at 44, citing Commission on the Review of the National Policy Toward Gambling, *Gambling in America*, 1976; and Gerstein, *et al.*, *op. cit.*

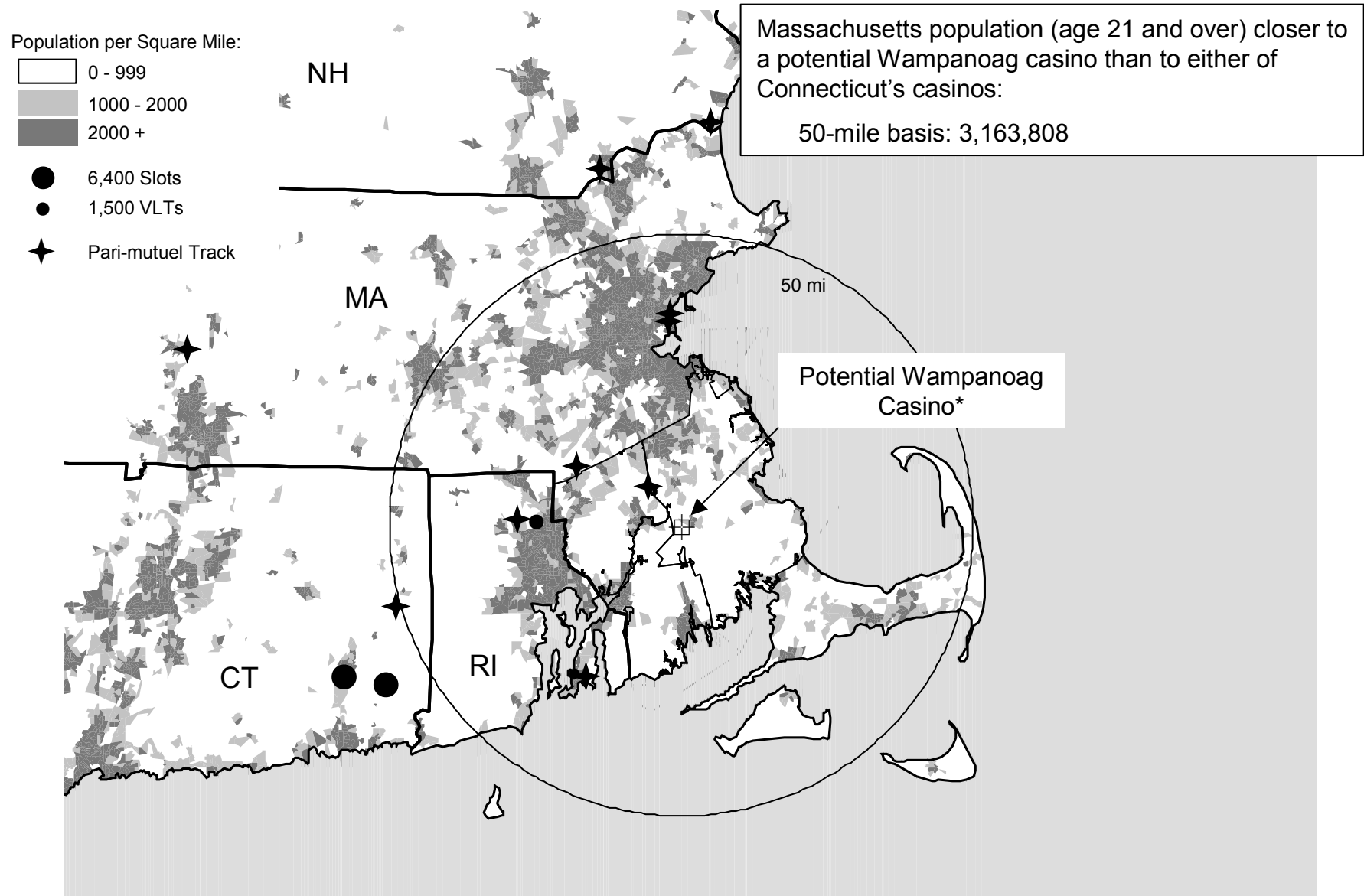
⁴⁴ See, *e.g.*, National Research Council, *op. cit.* Howard Shaffer, *et al. Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-Analysis*. Harvard Medical School, Division on Addictions, December 1997.

⁴⁵ See, *e.g.*, Gerstein, *et al.*, *op. cit.*, at 70.

⁴⁶ See, *e.g.* Nelson, Dennis J., Howard L. Erickson, and Robert J. Langan, *Indian Gaming and its Impact on Law Enforcement in Wisconsin*, API Consulting Services, 1996; and Taylor, *et al.*, *op. cit.*

FIGURE 1

A WAMPANOAG FACILITY IN SOUTHEASTERN MASSACHUSETTS WOULD BE POISED TO RETAIN SUBSTANTIAL IN-STATE PATRONAGE



* In Bristol or Plymouth County, excluding Fall River or New Bedford.

Sources: GeoLytics CensusCD 2000 Short Form, GeoLytics Inc., East Brunswick, NJ 2001; locational and capacity information of gaming facilities obtained from www.casinocity.com, www.geocode.com, www.mapquest.com,