

Casinos: An Ecological Gamble

The Environmental Implications of Allowing
Resort Casinos in Massachusetts

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Introduction

In November 2011, the Commonwealth of Massachusetts passed a bill allowing for up to three resort casinos and one slots parlor to be built in the state. The push to allow casinos was largely in response to the need to generate more state revenue. Currently, residents of Massachusetts who wish to gamble primarily do so at the Mohegan Sun or Foxwoods casinos in Connecticut and their spending represents a large amount of potential revenue for Massachusetts. There is significant literature on various social impacts of casinos, such as their effects on crime rates, local population density, and employment rates, but environmental impacts have not been studied as closely. In this paper, we aim to form a comprehensive picture of the environmental impacts of casinos and to what extent they have been part of the casino debate in Massachusetts, as well as to offer recommendations for how the environment could be more considered in conjunction with casinos.

Traditionally, environmental concerns are not at the forefront when people think about casinos. A casino has similar environmental impacts to a large mall, hotel, or resort; although those impacts may be significant, they are often given too little consideration. Any new casino requires a substantial amount of construction in what may or may not be an already developed area. Depending on where the casino is sited, its introduction could have a wide variety of impacts on local communities and ecosystems. Resort-style casinos of the type that will appear in Massachusetts require a lot of energy and water, and also raise issues of waste and sewage disposal. Increased traffic is another major concern, with the potential to overwhelm current infrastructures and the promise of increased greenhouse gas emissions.

The environment should be given more consideration in discussions about casinos and other similar projects. Vehicle emissions, energy and water use issues, and waste disposal

questions are not unique to casinos, but they do not receive as much attention as they deserve in the general discussions of casinos. The focus in casino literature, as well as among residents of towns that have been proposed as casino sites, tends to be on social issues that are more specific to casinos, such as the ethics of gambling or whether casinos increase local crime rates. These are important questions to be asking, but they should not be the only topics of discussion. Casinos impact the environment in ways to which we have become accustomed, so their detrimental effects can be easy to ignore. But as major new development sites in Massachusetts, casinos can and should be built with the environment in mind.

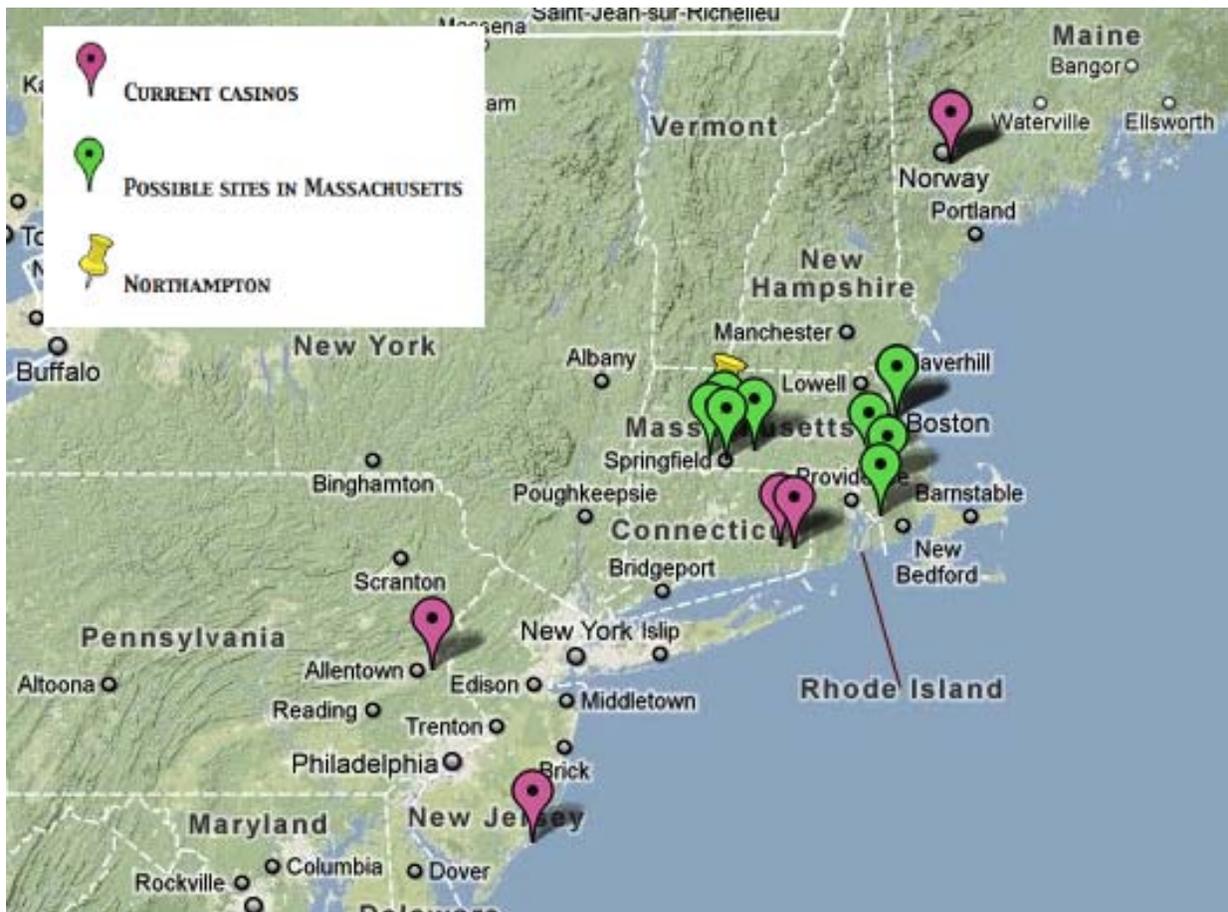


Figure 1. Locations of casinos (established and proposed) throughout New England.

In the following paper, we begin by laying out some basic language and theoretical background that has been integral to our understanding of the casino issue. We then provide some background on the history of the Massachusetts casino bill and the accompanying debate over it. Next, we discuss the potential environmental impacts of casinos, and we turn to examples of casinos in other states as case studies of these impacts. We end with a look at some of the possible casino sites in Massachusetts, and offer recommendations for how the state should more thoroughly incorporate environmental themes and practices to lessen the negative impacts of casinos.

Language and Theory

Before we proceed with our analysis, we wish to address and define several key terms that will be used throughout the rest of this paper. George Orwell wrote in his 1946 essay “Politics and the English Language” that “the whole tendency of modern prose is away from concreteness” (Orwell). Orwell is specifically concerned with political writing, and writing in general, that is vague and flowery instead of specific and direct. It is also important to consider the true meaning of every word that one uses, keeping in mind the meanings that the word may have gathered over time. In this study, the word we have struggled with primarily is “development.” This word often carries a connotation of advancement and improvement; however, we do not use it in this sense. In this essay, “development” specifically refers to the creation, construction, and/or fabrication of some entity.

Two other words that are often distinguished in literature are gaming (often referred to as the “gaming industry”) and gambling. Gambling and gaming were not differentiated in recent times to re-invent the activity, but have been in use since the sixteenth century. Gaming, which dates back to 1510, is defined as “the action of playing at games of chance for stakes,” while the

gaming industry is used to refer to legalized casinos and other gaming entities. The word gambling refers to the individual activity and implies that the activity has unduly high stakes (AGA). However, because not all states and countries make the distinction between the two words, gaming and gambling are used interchangeably in this paper.

Finally, we have found ourselves continually referencing the theory of “NIMBYism” throughout our work. NIMBY stands directly for “Not In My Back Yard.” The concept of NIMBYism comes into play in different levels and takes various forms in nearly every subject concerning the establishment of public infrastructure or even private constructions that may have some sort of potential threat. NIMBYism not only factored into arguments against adopting casinos in the Commonwealth, but now has an important role in the choice of location for most of the proposed casino sites. Although the selection of a site primarily depends on the community and investors involved, surrounding towns have had substantial influence on whether or not casinos will be built within their environs.

Evolution of the Massachusetts Casino Bill

A casino is a public room or facility that accommodates several types of gaming activities, and many casinos are built near or combined with hotels, cruise ships, restaurants, retail shopping, and other tourist attractions (Oxford Dictionary Online). Gambling has been seen in nearly every society in history; the first gambling houses in the United States were established around the early 1800’s in New Orleans, and many followed in Chicago, St. Louis, and San Francisco around the mid 1800’s. State lotteries also followed shortly after gaming houses, and in many cities the revenues raised from gambling through lotteries were used in the establishment of the nation’s earliest and most prestigious universities, churches, and libraries

(Dunstan). The state of Massachusetts established its state lottery in 1971, much later than most other states did. However, gambling has since become a leisure or entertainment activity practiced to make personal gain or profit, with the exception of several lotteries run by states that are still used to support public resources such as education.

The Legislature of Massachusetts has long put forward proposals for the establishment of casinos to supplement the State's revenue. As far back as March 1981, there was talk of approval by the legislature becoming a serious possibility, which caused MGM Grand Hotels Inc. to purchase estates in Hull and Adams, MA for potential casinos during the summer of 1981. However, opposition came from community groups and surrounding towns that claimed casinos would increase traffic, crime, and rent, and a statewide organization called Massachusetts Citizens Against Casinos coalesced to oppose the proposal. Although the towns of Hull and Adams, which were in desperate need of financial stimulus, supported the proposal, surrounding towns overthrew the decision to bring a casino into the area because of perceived negative impacts (Knight). In addition, a coalition of legislators from six New England states in addition to New York, New Jersey, and Pennsylvania formed a group known as LANCE - Legislators Against New Casino Establishments - to fight efforts of casino promoters in those states that same year. The incumbent governor of the state, Edward J. King, also became determined to fight against the establishment of casinos anywhere in the Commonwealth after a visit to Atlantic City (Davies). Another instance of NIMBYism concerning casinos in the state occurred when opposing citizens and local groups coalesced to become regional anti-casino groups. These groups, claiming that they existed to inform and educate citizens and legislators about the impacts of casinos in the state, rallied against the bill, which played a significant role in stopping towns from accepting investor proposals for a casino in their town (USS-MA).

Although the debate about allowing the establishment of casinos in the state has been going on for over 30 years, the argument regularly dies down due to opposition and change in governance. However, states have been increasingly turning to casinos in more recent times, primarily as an avenue to generate revenues that are funneled into education, property tax relief, and maintenance of dilapidated infrastructure. Governor Deval Patrick proposed the Massachusetts destination resort casino bill on October 11, 2007 that would allow for up to three resort casinos, one of which would be operated by an Indian tribe. Although the bill was proposed as part of the plan for economic development to create over 20,000 jobs and generate millions of dollars for the state, the proposal may also have been influenced by the Mashpee Wampanoag tribe. Immediately after Wampanoag tribe became federally recognized, they negotiated an intergovernmental agreement with the Town of Middleborough to build a destination-resort casino as a source of revenue for the tribe, but this required the state to legalize casino gambling before any tribe could open a casino through the federal process (Flanagan).

Although many legislators opposed the casino bill for a long time, several members of the House changed their opposing votes to support the bill due to the urgent need for revenue, including Northampton Representative, Peter Kocot. In an interview Kocot stated, “For me personally, I’m not a big proponent of this bill, I’m not a big supporter of casinos.” He continued, “I would have only voted for it if I thought the benefits were going to outweigh the cons. That’s the calculation I make on every vote, and I have to do that. That’s my job. But that was a very tough vote. I laid in bed at night thinking, ‘You know, how can we get money somewhere else?’ I mean, it if was for anything else, if those revenues weren’t going to good causes, I wouldn’t vote for the bill” (Kocot interview). The bill increases state revenue without raising taxes, and the standards for applicants and casino operators are high in terms of the

environment and law enforcement, added Kocot. Some of the positive elements within the bill that encouraged legislators such as Kocot to change votes include dedicated state police just for anti-organized crime, portions of the bill dedicated to preventing compulsive gambling, and many provisions for casinos to support the state lottery (which is dedicated to local aid), such as selling state lottery tickets within the casino (Kocot interview).

Another reason Governor Patrick proposed the establishment of casinos was to mitigate loss of revenue to surrounding states such as Connecticut and Rhode Island, which had resort casinos that drew most Massachusetts gamblers. The proposal included methods to manage and control the industry and its impacts in the state, including the establishment of an independent seven-member Massachusetts Gaming Control Authority (MGCA) that would have authority over the gaming industry in addition to a twelve-member advisory committee (Session Laws 2011, Ch. 194, Sec. 15, 13). According to the proposal, establishment of the casinos would be limited to three regions – Southeast, West, and East – to ensure maximum benefit to the entire Commonwealth.

Despite oppositions and long debates, the casino bill was finally passed by lawmakers and signed by Governor Deval Patrick on November 22, 2011. Although social and economic impacts were thoroughly examined before the proposal was signed, no in-depth environmental impact studies were completed (Flanagan). The only requirements concerning the environment in the bill were that casinos need to be certified as gold or higher in Leadership in Environmental and Energy Design (LEED), meet and exceed building code requirements of the Massachusetts building energy code, and have 10% of their electricity come from renewable sources, whether it is purchased or generated on-site (Session Laws 2011, Ch. 194, Sec. 15, 13). This is a step beyond the requirements of many other states with existing casinos, but as a competition

strategy, some investors are trying to create even higher standards for their proposed casinos; this will be a detractor for other investors as a result of the high costs in trying to achieve such high environmental standards.

In addition to the regulations stated in the bill, casinos would have to follow the Massachusetts Environmental Policy Act (MEPA) regulations, and some parts of the Act address the establishment of casinos, including sub-sections 9, 15, and 18. MEPA applies to projects that exceed MEPA review thresholds and that require state agency action, financial assistance, a permit, or land transfer from state agencies. MEPA review is not a permit process and does not pass judgement on whether a project is environmentally beneficial; rather, it is a review process that takes place before permitting agencies act. The Act requires state agencies to study alternatives to the project and develop enforceable mitigation commitments, and provides a mechanism to ensure that investors take all feasible measures to avoid, minimize, and mitigate damage to the environment (EEA).

Possible environmental impacts of casinos

Proponents of casinos argue that they can be a long term economic development solution, creating positive economic and social benefits for the community. However, it is no secret that increased development will affect the natural environment within the surrounding communities (Salgot and Tapias). Casinos have largely avoided the discussion of their environmental impacts. Information and research on this topic is relatively sparse. There has been some research done on other types of tourism/development, i.e. golf courses and ski resorts, which can be applied to the casino industry. It is important to note that because of lack of information, the following section is a discussion of possible, not necessarily definite, environmental impacts of casinos.

Tourism's environmental impact can be divided into three impact areas: depletion of natural resources, pollution, and physical impacts. When the number of visitors from tourism is greater than the environment's ability to cope with the additional use, the result is dangerous environmental damage (Environmental Impacts of Tourism). The increased consumption and competition adds excess pressure on natural resources, often in areas where resources are already scarce. Freshwater is perhaps the natural resource with most overexploitation. The tourism industry overuses water for hotels, swimming pools, and other activities by tourists, often resulting in water shortages, decreased water quality, and increased wastewater for the surrounding communities to deal with. In addition to water, tourism also puts excessive pressure on land resources (fossil fuels, minerals, fertile soil, forests, wetlands, and wildlife). Intensified tourism destination construction has placed increased pressure on land and scenic landscapes. Precious ecosystems and biotas are disrupted by habitat fragmentation caused by direct development and infrastructure provisions.

Tourism, like heavy industry, can cause a plethora of different types of pollution (air, noise, light, waste and littering, and visual). Presumably after construction, a large number of people will begin traveling to the new tourist destination. According to a study examining the economic impacts of legalized gambling, there was estimated six-fold increase in traffic on Connecticut Route 2 near Foxwoods between 1980 and 1996 (Baxandall 6). This additional traffic will impact the air quality and infrastructure of the surrounding area. It is likely that air quality will worsen as a result of the additional vehicle emissions within the area. In addition, the required infrastructural changes (i.e. additional roads and highway exit additions) will be costly for both the state and local governments. In California, a project to improve access to a hard to reach casino on Native American reservation land cost around \$100 million (Arsenault 1). Not to

mention the inconvenience placed on local residents during infrastructure construction and after completion of the casino. Brimfield, Massachusetts, one of the proposed casino towns, was discussing the negative impact a \$30 million Massachusetts Turnpike interchange would have on their tiny rural town (around 3,500 residents) (Arsenault 1). Though Brimfield has since been removed from the discussion of possible casino towns, it still serves as an important example of the impacts a casino might have upon any given community. The additional vehicular travel will also increase the amount of noise pollution within a community. Perhaps one of the most overlooked environmental impacts is the increased wastewater produced by tourism. Without proper management and appropriate facilities the wastewater can threaten the health of humans and animals (Environmental Impacts of Tourism). While there is still much research that needs to be done, these predicted environmental impacts are important enough that policymakers and casino developers should keep them in mind within the coming months for site placement.

Casinos in other states

We have seen that the mention of casinos being built brings a number of topics up for debate: the jobs it will create, the traffic hazards it might cause, the moral implications it bears, the potential crime threat. Yet the potential environmental impact of the casino almost never appears on the list of primary concerns, and we have found this to hold true for Massachusetts. Therefore, we began investigating casinos in nearby states (that might be affected by the opening of casinos in Massachusetts) to find out what sort of a role the environment played in their decisions to build casinos, and what sort of environmental narrative they had. As case studies, we looked at the Bethlehem Sands Casino in Bethlehem, Pennsylvania, Mohegan Sun and Foxwoods in Connecticut, and the Oxford Casino in Oxford, Maine.

Connecticut was the first state of the three examined to open its casinos: Foxwoods in 1992, and Mohegan Sun in 1996. Foxwoods is the largest casino in the western hemisphere, and is owned by the Mashantucket Pequot Tribal Nation; Mohegan Sun is the second largest in the hemisphere (Sokolove). Foxwoods, by virtue of its very size and by what it provides, was once one of the largest electrical consumers in Connecticut, drawing almost 30 megawatts of electricity (Hanrahan). But in August 2010, the Pequots opened a new cogeneration plant that supplies half of the electricity needed by the Mashantucket Pequot Reservation as well as the heating and cooling needs for Foxwoods (Potter 42). While more efficient than traditional sources of electricity generation, the cogen plant still utilizes natural gas. Mike Collins, the sales manager for Yankee Gas, the primary natural gas supplier for the tribe, noted, “It’s a way of going green, though it’s not totally green like wind or solar power – it’s light green” (“Foxwoods to use...”). Nevertheless, the Public Relations Director for Foxwoods, Lori Potter, characterized the move as one that mimicked other such moves towards environmental awareness made by the tribe. She cited various recycling initiatives by the tribe, the incineration of casino waste to produce electricity (versus going to a landfill), the recycling of cooking grease into biodiesel, and the green roof of the Mashantucket Pequot Museum and Research Center, also located on the Foxwoods property. These, Potter wrote, “are merely one example of a growing trend across Indian Country, as tribes continue to advance their economic development initiatives in ways that conserve energy, reduce unnecessary waste and leverage natural resources in the most efficient ways possible, embracing core values for environmental stewardship and setting the pace for higher standards in corporate social responsibility” (Potter 43). Potter thus makes the argument that casinos on Native American land are moving toward greater environmental responsibility based on the core values of the tribes that run these casinos.

Mohegan Sun, also in Connecticut, is run by the Mohegan Tribe and plays on similar ideals. A U.S. Environmental Protection Agency case study found that the Mohegan Tribe was particularly successful in managing solid wastes, recycling 44 percent. A number of initiatives encourage source reduction and recycling, the sale of recyclable materials, use of native plants in landscaping to reduce water and chemical use, and adaptive reuse of old buildings (US EPA). Just as Foxwoods seems to be doing, Mohegan Sun is making small attempts at greening the large casino and the tribe that owns it.

There is an important distinction between casinos on Native American tribal land, and those that are not. Because Native American tribes are recognized as sovereign nations, they technically do not have to comply with federal regulations. This becomes particularly important in the case of the Massachusetts Wampanoag tribe, in the southeastern part of the state. Because they do not have a large enough area of land on mainland Massachusetts, the tribe would have a third party buy a piece of land for the tribe, which the government would then hold in trust. Governor Patrick would then negotiate a deal with the Wampanoag, in which he would attempt to recreate the environmental stipulations that have been placed in the Massachusetts bill (Kocot interview).

The Bethlehem Sands Casino in Pennsylvania, however, is not on Native American land. This casino opened in 2009 as part of a new development on the former site of the Bethlehem Steel Mills – a brownfield site. In a 2009 press release, the Las Vegas Sands Corporation described some of the green initiatives it planned to take with the new casino in Pennsylvania: construction waste recycling programs, extensive front and back of house recycling program, the use of biodegradable beverage cups, access via public transportation, and location on the City of Bethlehem Greenway, which provides access to pedestrian and bike traffic (Las Vegas Sands

Corporation 1-2). The casino is located on what was the largest brownfield site in the country, coming in at about 1600 acres (Las Vegas Sands Corporation 1; Papa 1). Occupied by the steel mills from 1863 until 1995, the site was contaminated with arsenic, lead, PAHs, and TCE; the Western Pennsylvania Brownfields Center estimated the total cost of environmental assessment and remediation at \$7.5 million (Papa 1). The same group also noted that, “In general, the surrounding community is supportive of the redevelopment and has a positive outlook about the planned uses, with the notable exception of the casino. There is a well-organized resistance to the gambling issue” (Papa 2).

The site was split into two sections: Bethlehem Works (the casino and a possible Smithsonian affiliate museum), owned by BethWorks, and the Bethlehem Commerce Center (for commercial and industrial use), owned by Lehigh Valley Industrial Park (LVIP). In 2006, the U.S. Environmental Protection Agency granted LVIP and HDR Engineering, Inc. a Phoenix Award for their work in transforming the brownfield site into the Bethlehem Commerce Center. The Phoenix Award, the “Oscar” of brownfields redevelopment, “honors individuals and groups working to solve critical environmental or social challenges, transforming blighted and contaminated areas into productive new uses and sustainable development projects” (Phoenix Awards). It is important to note that while this award went to the brownfield site upon which the casino would be placed, it did not refer directly to the casino and came several years prior to it. However, the casino and continuing development on the site provide further examples of the way in which a former brownfield may be used. Massachusetts State Representative Peter Kocot noted that site selection is one of the most important and impactful elements in assessing a casino’s environmental effects: “If [a casino] is going into a previously undisturbed natural area, you are disturbing, obviously, a large natural area in terms of that ecosystem, so there would

have to be questions about that...So then it becomes, is this casino going into an area that's pristine and forested and uninhabited, like the Foxwoods and Mohegan Sun casinos in Connecticut, or is it more like a Suffolk Downs in Boston situation...In those locations, the direct site impact is much less than if you were to build a casino at the old Mountain Park site on Mt. Tom, which has some parking lots, but nowhere near the necessary infrastructure to get people in and out" (Kocot interview).

The examples of Foxwoods and Bethlehem Sands demonstrate different ways in which environmental planning may easily become a part of casino development. From siting locations to energy sources, there are a variety of ways in which casinos may become "green"; it is not at all counterintuitive to incorporate sustainable strategies into the development of new casinos. However, it is very easy to leave these factors out.

Like many casinos, the Oxford Casino in Maine, set to open in 2012, has faced a number of challenges. However, somewhat uniquely, one of these challenges came from an environmental group, the Androscoggin River Alliance. This group filed a lawsuit challenging the project's environmental permits and claiming that the developers has not reviewed the entire project, analyzing only the first phase (the casino) and ignoring future phases (such as a hotel) (Cover, Portland Press Herald). The concern was over the ability of the casino to manage sewer and water needs without polluting nearby rivers and lakes; in response, the project claimed that they were "over-engineering" all systems to account for this. An attorney for the Androscoggin River Alliance, Stephen Hinchman, argued that "The primary concern remains if we're going to have a new casino in Maine this is absolutely the worst place for it" (Cover, Portland Press Herald). The project developers maintained that they had rightfully received the permits, and were being careful to comply with all environmental regulations. "It's going to be a very

thoughtful casino in a green space with nice landscaping,” said Scott Smith, community development director for the project (Cover, Kennebec Journal).

The Oxford Casino case puts the Bethlehem Sands case in direct contrast. In this instance, developers are indeed facing an environmental challenge over the construction of their casino; many argue that the casino is poorly located. The developers’ response is to maintain that they will comply with environmental regulations; they use the word “green” not accidentally to refer to landscaping while simultaneously evoking a sensation of environmentalism.

Likewise, the Mohegan Sun casino in Connecticut evokes environmental images by naming its three casinos the Casino of the Earth, Sky, and Wind. It also advertises a outdoor sun terrace, 55-foot indoor waterfall, and “electrifying water wall” (Mohegan Sun). These are all tactics that call on environmental ideals, without confronting environmental impact issues.

The consideration of casinos in other states is also important when we consider the proximity of these casinos to each other. The gambling dollar, according to Representative Kocot, is a static dollar. That is to say, building a new casino does not create more gamblers; rather, it just gives those gamblers that already exist a different place to go. “If you go to the parking lot at Foxwoods or Mohegan Sun on any day, over 65% of the license plates are from Massachusetts,” Kocot said. “So, people are coming from Massachusetts, they enjoy gambling, it’s a recreational pursuit for them, that’s how they like to spend their time, they go there, they enjoy themselves, and they come back to Massachusetts. But what they’ve done in the meantime is they’ve left their money in Connecticut.” Building a casino (or more) in Massachusetts will keep that money in Massachusetts. And that, ultimately, is what spurred Representative Kocot to vote yes on the Massachusetts casino bill - once significant protections within the bill were put into place (Kocot interview).

However, the creation of a new casino in Massachusetts would then inherently take business away from locations such as Foxwoods and Mohegan Sun, which are already struggling. Foxwoods is currently \$2.3 billion in debt (Sokolove). A recent *New York Times* article on the issues states, “Casino gambling has become a commodity, available within a day’s drive to the vast majority of U.S. residents. Some in the industry talk of there being an oversupply, as if their product were lumber or soybeans” (Sokolove). If both Kocot and Sokolove are right, and Massachusetts casinos will simply pull business away from other casinos rather than generating new clientele, the Connecticut casinos in particular will face a strong challenge. Both Foxwoods and Mohegan Sun are enormous and complex structures; if either one went out of business, it would leave behind a large, empty, built lot. This has the potential to cause even greater environmental impact: the casino buildings themselves are remotely located; they are large structures that may not be easily adapted to other purposes. The demolition or repurposing of these buildings would generate a large amount of waste and use a large amount of energy. On the flip side, newly proposed casinos will be aware of the potentially limited market and clientele; thus some make the argument that fewer and fewer large casinos will be built (Harwood). However, considering the current market, it seems likely that for the immediate future the potential for large resort-style casinos remains firmly in place.

Yet casino development in Massachusetts and other states as a response to revenue challenges poses problems beyond just the regional level. Sites such as Atlantic City, Las Vegas, and Macau are destinations that rely almost solely on gamblers to stay afloat. As more casinos open locally, these and other such destinations will have to find a way to attract gamblers to travel the distance, rather than simply go to a nearby casino. One of the ways in which this is happening is via diversification of the tourist activities available at these sites (Harwood). In a

city such as Las Vegas, currently facing a severe water challenge, the effects of this might be devastating to the environment. The Las Vegas water supply is ever dwindling, and the *Las Vegas Sun* newspaper is even running a countdown of the days until Las Vegas runs out of water - 3192 days as of May 6th, 2012 (Las Vegas Sun). Thus increased construction, traffic, and usage could have particularly negative impacts in Las Vegas; but this city is not the only one facing such issues. Thus we must also consider the widespread impact that regional and state casinos may have on the already developed gaming industry, and how that industry's reactions will impact the environment.

Proposed Casino Sites: Focus on Western Massachusetts

The Massachusetts casino bill allows for the creation of three resort casinos and one slots parlor distributed throughout the Commonwealth. Quite a few cities and towns have been under consideration to receive casinos, including several in the western part of the state. Given their geographic proximity and relevance to Northampton, we initially chose to focus primarily on these western sites rather than those in the east. Currently, the four sites being discussed in western Massachusetts are Palmer, Springfield, Holyoke, and Westfield; this group has changed over time. Brimfield, which neighbors Palmer, was being considered as a site by MGM Resorts until recently, when the company pulled out of the project in mid-March (Stabile). In each city or town, a different resort company is involved in plans to develop a casino (and there are still several developers looking into Westfield, the newest proposed site). Part of the approval process outlined in the casino law is a required binding vote within the "host community," which, if a city or town is larger than 125,000 residents, refers to the specific ward in which the casino would be located (Session Laws 2011, Ch. 194, Sec. 15, 13). Therefore, residents have a

direct voice in whether a casino will be built in their town. Casino developers are also required to negotiate agreements with neighboring towns to ensure that any anticipated impacts will be properly mitigated.

Palmer, Springfield, Holyoke, and Westfield are each at a different stage of the casino planning process. In the end, only one of them, if any, will get a casino – the resorts are to be spread across the Commonwealth, meaning that there can be just one casino in Western Massachusetts. The other two designated regions are East and Southeast, and, in fact, both of those areas may be more likely than Western Massachusetts to receive the first casino license. The eastern part of the state has more established infrastructure, as well as a larger immediate population to draw on. The potential for a casino in the east will be further addressed at the end of this section, but it is also important background for evaluating casino sites in Western Massachusetts. Despite the greater likelihood of an Eastern Massachusetts casino, we have retained a substantial focus on western sites, and Palmer in particular, because of their relevance to our Northampton location as well as the substantial environmental implications posed by these sites, which tend to differ from those found at the type of sites being considered in the east. Although our analysis primarily focuses on Palmer, it is helpful to first look briefly at each of the other proposed sites in western Massachusetts for some background and context.

Currently, Holyoke seems to be the least likely potential site in Western Massachusetts to receive a casino. Although residents of Holyoke have voted in favor of a casino in the past, newly elected Mayor Alex Morse ran on an anti-casino platform and has repeatedly said that he will oppose any attempt to site a casino in the city. Paper City Development, partnered with Hard Rock International, expressed interest in siting a casino in Holyoke on Route 141, on the land currently occupied by the Wyckoff Country Club. However, given the mayor's opposition,

they have begun looking into other options. A group of Holyoke residents is gathering signatures for a nonbinding November ballot question on whether there should be a casino in the city, so the decision making process is hardly over. However, the mayor's opposition is a significant obstacle for casino supporters. The Holyoke City Council decided against recommending the creation of a casino committee because they anticipated that Morse would block such a suggestion (Plaisance). Westfield, the newest proposed site, likely became of interest to developers due to the loss of potential sites in Holyoke and Brimfield. Because the Westfield site is in such early stages, not much is known about whether a casino is likely to be built there. However, Westfield's mayor is receptive to casino plans, and the site is adjacent to the Massachusetts Turnpike, providing easy access for visitors from the eastern part of the state as well as from New York.

Springfield is the only proposed casino site in which a resort company already owns land. Ameristar Resorts recently purchased the former site of the Westinghouse Electric Corporation in Springfield, although the city does not seem to have taken many further steps towards adopting a casino there (Ring). Ameristar is continuing to look into the characteristics of the site and what sorts of impacts it will have to contend with. It is important to note that Ameristar's owning the land does not make the casino itself any more likely to happen. Springfield would still have to go through the same process as any other host community and negotiate an agreement with the Ameristar after residents have approved the casino in a binding vote.

We chose to focus primarily on Palmer because it is one of the most likely candidates for a western Massachusetts casino, and because it has been under consideration for several years, meaning that it has had time to assess potential impacts. Additionally, the fact that it is a small, fairly rural town makes it an interesting case study in contrast with some of the larger, more

populous areas that have also been proposed as casino sites. Palmer is a town of 32.14 square miles in Hamden County with a population of 12,750, surrounded by Ludlow, Belchertown, Ware, Warren, Brimfield, Monson, and Wilbraham (Town of Palmer). Mohegan Sun, which operates a casino in neighboring Connecticut, has been involved in the casino planning process in the town of Palmer for years; it recently announced that it will pay the town an initial \$50,000 to help fund studies on potential traffic, public safety, and other impacts. The company is leasing its proposed site, 150 acres of land off Route 32, from a real estate firm in the town.

Palmer has had time to consider its potential role as a casino site in Massachusetts. In April 2009, the town's Citizens Casino Impact Study Committee (CCISC) submitted its final report, the result of over a year's worth of impact studies, to the Town Council of Palmer. In the report, the Committee recognizes that a casino is likely to be sited in Palmer, and it recommends that the town establish a committee to negotiate an agreement with Mohegan Sun that will "maximize the benefits to the Town of Palmer" (CCISC, Cover Letter). In this way, the Committee is quite practical – it recognizes the possibility that a casino will be built in Palmer and suggests that as long as that happens, the casino should work as much as possible with the town rather than against it. The report goes on to explain potential casino impacts to things such as the town's infrastructure, water, culture, and school system. The recommendations that they make are all in line with their main goal to ensure that their town will see maximum benefits from a casino.

The Palmer Committee expressed concern that their town has not historically been attentive enough to environmental concerns, and that reckless development could have substantial negative impacts on their community. Their report reads, "like many New England towns, Palmer has a laissez-faire attitude towards development, growth, and long term capital

planning. The town's natural resources are being depleted at an alarming rate" (CCISC, Sec. 4, Pt. 1, 2). The specific environmental risks enumerated in the report include impacts on drainage at the casino site, maintenance of natural habitats, light and noise pollution, waste and water treatment, and traffic patterns. The Committee writes of the proposed site, "there is a wetland located in the southern section of the property and there are a number of known streams descending from the hillside...The preliminary plans available for the construction of a resort casino include approximately 70 acres of site development. A site as large as this would undoubtedly affect the drainage patterns of the area" (CCISC, Sec. 4, Pt. 1, 5). They recommend that attention should be paid to preserving natural habitats in this and any future development projects within the town. With regards to traffic, another major concern, the Committee reports, "Mohegan Sun has estimated that the casino will see 9,500 cars per week day and 13,500 cars per weekend day, not including employee vehicles, commercial vehicles, and buses" (CCISC, Sec. 4, Pt. 1, 5). For a town of fewer than 13,000 residents, this represents a huge increase in traffic volume that could have substantial environmental and social impacts. The Committee suggested studying public transportation options, such as rail, that could serve the new casino.

The Massachusetts casino law requires applicants for a casino license to go through a number of steps. One of these steps is creating a plan to assess and mitigate impact, not only on the community where the casino will be built, but also in all surrounding communities. This process will hopefully ensure that environmental concerns in the town itself, as well as in the immediate region, are addressed (however, since no one has actually reached this step yet, it is hard to gauge its actual effectiveness). Though only the town where the casino is proposed will actually vote to approve or deny the casino, the politicians working on the bill found it important to account for the concerns of those living in surrounding towns that could also be impacted. If

plans for Palmer move forward, it will be interesting to see environmental mitigation plans for that part of the state. A Palmer casino would be a “casino in the woods,” a term that has been widely used to describe those in rural areas. A new resort casino would be a huge change to the social and environmental fabric of the town and would have substantial impacts, presumably requiring a quite intensive mitigation plan. It is also worth noting that Palmer neighbors Brimfield, where a casino plan was dropped due to infrastructural concerns, and it may face a lot of similar challenges to those that halted the Brimfield plans. These would have to be addressed in the planning process as well.

According to Representative Peter Kocot, the number of steps and the initial capital investment required by the Massachusetts casino law is high enough to discourage many applicants, ensuring that only those who can meet the law’s standards may apply. He believes the first casino likely to be built in Massachusetts will be in the eastern part of the state at Suffolk Downs, an already existing racetrack in the Boston area. Gambling, in the form of racing bets, has already been present at this venue since its opening in 1935. Suffolk Downs is easily accessible by public transportation -- it lies directly on a recently refurbished T line -- which will decrease vehicle emissions associated with traveling to and from the casino, as well as likely cut down on drunk driving by casino visitors. Additionally, it is located in an urban center with multiple other attractions and is in close proximity to Logan International Airport, enabling more people to travel there. Kocot predicted a time frame of three to five years to see a casino at Suffolk Downs; after that, he said, it is unlikely that other casinos would appear quickly due to the size of the gambling market (Kocot interview). It makes sense for a casino to be sited in a location with enough existing infrastructure, transit access, and available visitors to minimize the additional development needed; this makes it likely that Massachusetts’s first

casino will be in the eastern part of the state, whether or not it is at Suffolk Downs. Once Massachusetts has one casino, it is unlikely a developer will see as much profit in constructing a second one. Therefore, it seems that the proposed sites in western Massachusetts will still have time to consider the issue and to look at the impacts that casinos could have on their environments and social systems.

Recommendations

While we think that the moves to address environmental concerns within the Massachusetts casino bill are important, we believe that casino investors and builders can do much more to develop truly green casinos. Legislative solutions are influential because they put exacting requirements on developers; casinos must comply with MEPA regulations, must earn LEED gold certification, etc. However, with any legislation solution is the danger of loopholes; for instance, it is possible for a project to comply precisely with MEPA, but still have a detrimental environmental impact. But one might say it would be better to have policy in place to deal with the environmental implications of casinos rather than not have any legislative action preventing the possible environmental damage. Due to the current polarized political climate, it is likely that any serious policy requiring strict casino construction requirements would meet a plethora of opposition. Therefore, true solutions must come from both legislative initiative, and individual/corporate initiative.

As such, we have a series of recommendations for the ways in which casinos can be sustainably developed. We would recommend that casinos be built to exceed the LEED certification standard. There is a potential, even, for casinos to complete the Living Building Challenge (Living Building Challenge). Further government incentives, such as the

requirements in the Massachusetts casino bill, can push this idea. In this vein, casinos should purchase or generate on-site *more* than 10% of their electricity from renewable sources (the current requirement in the Massachusetts casino bill). While 10% is a start, why not 20%? 50%? 100%? The generation of renewable energy has an initial capital investment that could likely be encompassed by the already large monetary investment required for a resort-style casino in Massachusetts; after the initial investment, casinos would save money that would formerly have gone to electricity, heating, and cooling bills.

We also believe that siting decisions are extremely important for casinos. Establishment of casinos in a location that has already existing infrastructure reduces that quantity of pristine land converted into new buildings and roads. Brownfield sites are one option; the investment in a casino can be used to clean up such locations. Building in locations that are easily accessible by public transport will decrease vehicle emissions, as well as drunk driving. Finally, placing casinos in already developed areas (infill) reduces construction emissions, as well as cost.

There are also a number of smaller measures that can be utilized to help casinos improve their sustainability. These include on-site practices such as recycling, composting, and water conservation, and might even go so far as a zero-waste pledge. Additionally, casinos can invest in replacement or upgrade of utilities to meet the highest standards, perhaps decennially; they can also invest in carbon offsets for things such as customer vehicle emissions.

These recommendations by no mean cover the sum total of all possible things casinos can do to be truly green. However, we believe that by beginning with initiatives such as these, and maintaining awareness of environmentally friendly or even beneficial practices, casinos are poised become much more sustainable than current standards suggest.

- ❖ Casinos should be built to exceed the gold LEED certification standard
 - Living building potential
- ❖ Establish casinos in a location that has already existing infrastructure
 - Brownfield sites
 - Accessible locations
- ❖ Produce or purchase more than 10% of electricity from renewable sources
- ❖ Investment in replacement/upgrade of utilities to meet the highest standards
- ❖ Investment in carbon offsets
- ❖ On-site sustainable practices
 - Composting
 - Recycling
 - Water conservation practices

Figure 2. Summary of recommendations

Conclusion

Casinos can serve as an important source of revenue for a state, and are becoming an increasingly feasible option as states struggle to generate sufficient funds in the current economy. As a contemporary and local issue, the casino bill in the Commonwealth of Massachusetts is important to consider as an example of the potential environmental effects of casinos, and how these effects can be mitigated or prevented.

The Massachusetts bill itself highlights some of the potential environmental impacts of casinos, and requires potential investors to comply with high standards for sustainability. This on its own, however, does not eliminate the potential for casinos to have a detrimental impact on the environment. Similar to other tourist attractions - golf courses, ski resorts, entertainment complexes, hotels - casinos by their very nature place heavy demands on existing infrastructure for water, sewage, and electricity needs. Through discussion with a legislator and the study of casinos in other states, we have seen a number of small steps that casinos may take to mitigate their impact: careful site selection, on-site generation of renewable electricity, specific commitment to recycling initiatives, and attention to water and sewage demands.

However, we argue that casinos should do more than this to be more authentically “green.” Casinos are a destination, and attract a wide variety of people for large spans of time. As such, they are perfectly poised to serve as exemplar institutions of what it means to be truly sustainable and environmentally conscious. Through corporate attitude, siting and building decisions, awareness of local and regional needs, and a commitment to caring for the environment, casinos can become an important element of environmental sustainability.

Casinos, like any other large construction project, have their inherent detractors. These come in the form of social and infrastructural issues as well as environmental issues not already covered in the previous two categories. However, because they can provide such important economic revenue and serve as a source of job creation, it is nearly impossible to effectively and convincingly argue that casinos should never be built. Rather, we argue that the construction of a casino should be a carefully considered process inclusive of a wide variety of parties that strives for a goal of environmental sustainability.

If you’re going to build them, build them green.

Works Cited

- Arsenault, Mark. "For Casinos, Road to Approval Starts with Traffic Relief." *Boston.com*. 22 Feb. 2012. Web. <http://articles.boston.com/2012-02-22/news/31087969_1_casino-traffic-casino-opponents-tribal-casino>.
- Barrow, Clyde, David Borges. Taking The Gamble I : Do Massachusetts Residents Want A Resort Casino? *Center For Policy Analysis, University Of Massachusetts Dartmouth*. February 2007. Web. 23 March 2012. <http://www.umassd.edu/media/umassdartmouth/seppce/centerforpolicyanalysis/taking_the_gamble_casinos.pdf>.
- Baxandall, Phineas, and Bruce Sacerdote. "Betting on the Future: The Economic Impact of Legalized Gambling." *Rappaport Institute for Greater Boston Policy Briefs*. Rappaport Institute for Greater Boston, 13 Jan. 2005. Web. <http://www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/centers_programs/centers/rappaport/policybriefs/betting_final.pdf>.
- Bolstein, Joel. "Bethlehem Casino Opens on Pennsylvania Brownfield Site." *Pennsylvania Brownfields & Environmental Law*. Fox Rothschild LLP, 11 June 2009. Web. 2 Apr. 2012. <<http://pabrownfieldsenvironmentallaw.foxrothschild.com/2009/06/articles/bethlehem-casino-opens-on-pennsylvania-brownfield-site/>>.
- "Casino." *Oxford Dictionary online*. 2012. Web. 23 March 2012. <<http://oxforddictionaries.com/definition/casino?region=us>>.
- Citizen's Casino Impact Study Committee: "Final Report to the Town Council." 13 April 2009. <http://www.townofpalmer.com/Pages/PalmerMA_BComm/casino>.
- Cover, Susan M. "Oxford casino rolling along." *The Portland Press Herald* 18 Sept. 2011. Web. 2 Apr. 2012. <http://www.pressherald.com/news/oxford-casino-rolling-along_2011-09-18.html>.
- Cover, Susan M. "Casino planners shrug off possible competition." *Kennebec Journal* 18 Sept. 2012. Web. 2 Apr. 2012. <http://www.kjonline.com/news/oxfordcasino-plannersshrug-off-possible-competition_2011-09-17.html>.
- Davies, Dick. "Legislators Fight Spread of Casinos." *The New York Times*. LexisNexis Academic. Dec. 27 1981. Web. 22 March 2012. <<http://www.nytimes.com/1981/12/27/nyregion/legislators-fight-spread-of-casinos.html>>.
- Dunstan, Roger. Gambling in California. *California State Library*. Jan. 1997. Web. 22 March 2012. <<http://www.library.ca.gov/crb/97/03/crb97003.html>>.

- "Environmental Impacts of Tourism." *Environmental Impacts of Tourism*. The Global Development Research Center. Web. 08 Apr. 2012. <<http://www.gdrc.org/uem/eco-tour/envi/one.html>>.
- Flanagan, Caitlin. The Need for Compromise: Introducing Indian Gaming and Commercial Casinos to Massachusetts. *LexisNexis Academic*. 2008. Web. 23 March 2012. <<http://www.lexisnexis.com/hottopics/lnacademic/?verb=sr&csi=139120&sr=AUTHOR%28Flanagan%29%2BAND%2BTITLE%28Need+for+Compromise%3A+Introducing+Indian+Gaming+and+Commercial+Casinos+to+Massachusetts%2C+The%29%2BAND%2BDATE%2BIS%2B2008>>.
- "Foxwoods to use cogeneration heat." *Boston.com*, 18 Jan. 2010. Associated Press. Web. 2 Apr. 2012. <http://articles.boston.com/2010-01-18/business/29330835_1_cogeneration-solar-power-natural-gas>.
- "Governor Patrick Files Resort Casino Legislation." *Governor of Massachusetts*. Oct. 2007. Web. 22 Mar. 2012. <<http://www.mass.gov/governor/pressoffice/pressreleases/2007/resort-casino-legislation-filed-2.html>>.
- Hanrahan, Ryan. "Foxwoods Goes Green." *NBC Connecticut* 11 Nov. 2010. Web. 2 Apr. 2012. <<http://www.nbcconnecticut.com/news/green/Foxwoods-Goes-Green-103332124.html>>.
- Harwood, John. "Betting on Casinos." *On Point*. NPR. 17 Apr. 2012. Radio. <<http://onpoint.wbur.org/2012/04/17/casino>>.
- Knight, Michael. "Casino Revenues Appeal to Bay State." *The New York Times*. LexisNexis Academic. March 13, 1981. Web. 22 March 2012. <<http://www.nytimes.com/1981/03/13/us/casino-revenues-appeal-to-bay-state.html>>.
- Las Vegas Sands Corporation. "Sands Casino Resort Bethlehem Announces Sustainable Construction and Operations Plans." Press Release. Apr. 2009. Web. 2 Apr. 2012. <http://www.lasvegassands.com/uploadedFiles/LasVegasSands/LVS_Eco_360/PR_eco360_SandsPA.pdf>.
- Las Vegas Sun. "For Want of Water - Quenching Las Vegas' Thirst." Web. 6 May 2012. <<http://www.lasvegassun.com/news/topics/water/>>.
- Living Building Challenge. International Living Future Institute, 2010. Web. 6 May 2012. <<https://ilbi.org/lbc>>.
- "Massachusetts could host 3 urban casinos if Springfield wins license in west." *Masslive*. Web. 1 April 2012. <http://www.masslive.com/politics/index.ssf/2012/04/massachusetts_could>.

[host_three.html](#)>.

“Massachusetts Environmental Policy Act.” *Executive Office of Energy and Environmental Affairs (EEA)*. 2009. Web. 26 March 2012.
<<http://www.env.state.ma.us/mepa/about.aspx>>.

Massachusetts State Legislature. “An Act Establishing Expanded Gaming in the Commonwealth.” LB 3807. 16 November 2011. *Massachusetts Session Laws, 2011*. Web. 26 March 2012.
<<http://www.malegislature.gov/Laws/SessionLaws/Acts/2011/Chapter194>>.

Mohegan Sun. 2012. Web. 2 Apr. 2012. <<http://www.mohegansun.com/>>.

Orwell, George. “Politics and the English Language.” 1946. Web. 23 Apr. 2012.
<<http://www.mtholyoke.edu/acad/intrel/orwell46.htm>>.

Papa, Ronald. “Bethlehem Steel Plant.” *Western Pennsylvania Brownfields Center*. Carnegie Mellon University, Steinbrenner Institute for Environmental Education and Research, 2008. Web. 2 Apr. 2012.
<<http://www.cmu.edu/steinbrenner/brownfields/Case%20Studies/pdf/bethlehem%20steel%20case%20study.pdf>>.

Phoenix Awards, The. The Pheonix Awards Institute, Inc., 2008. Web. 2 Apr. 2012.
<<http://www.phoenixawards.org/index.html>>.

Plaisance, Mike. “Holyoke City Council turns away bid to form casino-study board.” *Masslive*. Web. 20 March 2012. <http://www.masslive.com/news/index.ssf/2012/03/holyoke_city_council_turns_awa.html>.

Potter, Lori. “Mashantucket Pequots Unveil Latest Environmentally Friendly Green Initiatives.” *Indian Gaming* Sept. 2010: 42-43. Web. 2 Apr. 2012.
<http://www.indiangaming.com/istore/Sep10_Potter.pdf>.

Ring, Dan. “Ameristar Casinos plans to close deal for Springfield land and compete for Western Massachusetts casino license.” *Masslive*. Web. 29 December 2012.
<http://www.masslive.com/news/index.ssf/2011/12/ameristar_casinos_of_nevada_is.html>.

Salgot, Miquel, and Josefina C. Tapias. "Golf Courses: Environmental Impacts." *Tourism and Hospitality Research* 6.3 (2006): 218-26. Print.

Sokolove, Michael. “Foxwoods is Fighting for Its Life.” *New York Times Magazine* 14 Mar. 2012. Web. 2 Apr. 2012. <http://www.nytimes.com/2012/03/18/magazine/mike-sokolove-foxwood-casinos.html?_r=1&src=me&ref=general>.

Stabile, Lori. "MGM Resorts drops Brimfield casino plan; launches effort to find new site in Western Massachusetts." *Masslive*. Web. 27 March 2012. <http://www.masslive.com/news/index.ssf/2012/03/mgm_resorts_drops_brimfield_ca.html>.

Town of Palmer, Massachusetts. "About Our Community." Web. <http://www.townofpalmer.com/Pages/PalmerMA_WebDocs/about>.

"United to Stop Slots in Massachusetts." *United to Stop Slots in Massachusetts*. n.d. Web. 23 March 2012. <<http://uss-mass.org/>>.

U.S. EPA. "Mohegan Tribe of Indians of Connecticut." *Wastes* 3 Apr. 2012. Web. 2 Apr. 2012. <<http://www.epa.gov/wastes/wyl/tribal/thirds/mohegan.htm>>.