

# THE INNOVATION GROUP

Part I Technical Reply (ITN# 859)

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# Part I Technical Reply (ITN# 859)

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March 19, 2013

The Florida Legislature c/o Ms. Jeannie Evans Purchasing Program Administrator 111 West Madison Street, Room 874 Tallahassee, Florida 32399-1400

RE: Letter of Transmittal Technical Reply (ITN #859) - Part I

Dear Ms. Evans and State Legislators,

The Innovation Group Project Team ("Project Team") is pleased to submit the attached response to the Florida State Legislature's ITN#859 Two Part Gaming Study. Our team is honored to have the opportunity to potentially work with the Florida State Legislature as it begins to research and fully understand the statewide impact of gambling.

The Project Team is confident that this proposal addresses the research goals of the state of Florida related to understanding the current and potential future impacts and direction of gambling and related activities. The team itself has been strategically assembled to offer the state the best possible combination of legal, regulatory, academic, economic, research and government disciplines to achieve the required research goals, cohesively and efficiently, under the leadership of The Innovation Group. To adequately complete the tasks at hand a balance of national and local expertise are provided with an industry perspective that acknowledges the state's governmental obligations while balancing public and private goals and objectives.

As President of The Innovation Group, Michael Soll, the signee on all documents included in this package, is authorized to represent the Respondent and binds the Respondent relative to all matters contained within this reply. The Project Team including the lead Respondent, The Innovation Group, has read, understands, complies, and agrees with all of the provisions laid out in this ITN (ITN #859).

The Respondent, The Innovation Group, is authorized to conduct business in Florida and is up to date with its filing with the Division of Corporations. The Innovation Group's most recent filing on January 17th 2013 can be found under the corporation name: Urban Systems/The Innovation Group, Inc., and under filing number F10000001052. The federal tax identification number of The Innovation Group is 721449171.

Sincerely,

Michael Soll President

The Innovation Group

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## 6.2.1.1 EXECUTIVE SUMMARY

The Respondent shall include a summary, no longer than two single-sided pages in length, that demonstrates the Respondent's overall understanding of the requirements of Part I of the Two-Part Study described in this ITN. The Summary shall adequately convey the Respondent's approach to delivering the product and services according to the specifications of this ITN.

The Innovation Group Project Team ("Project Team") proposal for Part I of the Two-Part Gaming Study comprises the technical requirements laid out by the Florida Legislature, including responses to Sections 1-8 of the ITN document and commensurate attachments and forms. The key substantive components include an introduction to the Project Team and its qualifications and experience, a sample project deliverable, the proposed scope of work, and a summary of the project timeline adhering to the required completion dates. The required project cost proposal is included under separate cover.

Based on our review of the Invitation to Negotiate #859 ITN documents and our familiarity with the state's current gaming landscape, we have valuable insight regarding the project's needs and goals which include: (1) a complete understanding of market demand potential and dynamics of gambling in the state, (2) a thorough knowledge base of the economic and fiscal impacts associated with the current landscape of gaming and the potential new developments, and (3) a comprehensive regulatory plan for any potential expanded gaming.

The Project Team's comprehensive approach to addressing the state's research requirements is reflected both through the selection of Project Team participants, and the methodological design which drives the scope of work.

## 6.2.1.1.a Specialists who Excel at Their Disciplines

The Project Team has been strategically assembled to offer the state the best possible combination of resources to achieve the required research goals, cohesively and efficiently, under the leadership of The Innovation Group. To adequately complete the tasks at hand a balance of national and local expertise are required, across multiple disciplines, with an industry perspective that acknowledges the State's governmental obligations while balancing public and private goals and objectives. Proposed team members include The Innovation Group ("TIG"); University of Nevada, Las Vegas' International Gaming Institute ("UNLV"); Arduin, Laffer & Moore Econometrics (ALME); and Regulatory Management Counselors ("RMC Legal").

The chart below shows the main areas of responsibility and expertise for each group associated with the team:

	TIG	UNLV	ALME	RMC
Project Management	х			
National Industry Research	х	х		Х
Market Analysis	X			
General Econometrics	X			
Florida Econometrics/Tourism	х		X	
Social Impacts	х	х	X	
Regulatory and Tax	х	x		Х

## 6.2.1.1.b Approach & Methodology

The project approach and methodology have been carefully developed by the Project Team with the aim of comprehensively assessing the state of the various forms of gaming available in Florida today, taking national and industry context into account. The composition of our team members will best allow us to assess the potential future gaming development scenarios and their economic and social impacts. The Project Team's approach and methodology can be summarized in the following manner:

- Ultimate goal of providing the state with an assessment of the impacts of multiple gaming development scenarios, which maximize economic benefits to the state while minimizing costs;
- Acknowledgement that activities between public and private entities in the regulatory and development process within the industry can be predicted and designed to maximize benefits to the state;
- Research grounded in national historical industry context including all relevant forms of gaming;
- Experience nationally and within Florida, and with all forms of current and potentially available (i.e., online) gaming;
- Extensive background performance and impact data utilized, including that applicable
  to the industry nationally and within the state of Florida;
- Inherent need in the research to consider multiple development and regulatory scenarios and combinations of scenarios, iteratively, to reflect the continuum of opportunities and risks to the state and interested third parties, accomplished through the following methodological highlights:
  - Customized visitor demand and revenue model, based on a calibration of current performance, with the ability to assign gaming trips for locals and existing and potential new tourists within Florida and competing markets to different types of existing and future venues comprising multiple scenarios;
  - Pro forma development across scenarios to provide sensitivities to profitability, yield and inputs for econometric modeling which require expense and employment assumptions;
  - Capital cost modeling to reflect construction cost and employment levels, also required inputs in econometric modeling;
  - Academic leadership in the assessment of economic impacts to insure that both tangible, quantifiable impacts and less tangible social costs are reflected in the assessments of economic impacts.

The hinovation Group March 2013 Page 4

## 6.2.1.2 ORGANIZATIONAL BACKGROUND

## 6.2.1.2.a Synopsis of Qualifications & Abilities

The Respondent shall include evidence of its qualifications and capability to provide the services in the Scope of Work for Part I of Two-Part Study described in this ITN by describing its organizational background and experience.

The description shall include:

(a) A synopsis of its qualifications and abilities to perform the services described in this ITN'

## 6.2.1.2.a (1) - Florida-Based Leadership & Primary Contact

Official Registered Name: Urban Systems/The Innovation Group, Inc.

Federal Tax Identification: 72-1449171 Document Filing Number: F10000001052

Team Lead: Michael Soll, President, The Innovation Group

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Mr. Soll is the primary contact for any ITN questions.

## 6.2.1.2.a (2) - Firm Overviews

The Project Team has been strategically assembled to offer the state the best possible combination of legal, regulatory, academic, economic, research and government disciplines to achieve the required research goals, cohesively and efficiently, under the leadership of The Innovation Group. To adequately complete the tasks at hand a balance of national and local expertise are provided with an industry perspective that acknowledges the state's governmental obligations while balancing public and private goals and objectives. As a prelude to a more granular discussion of the project team the following chart summarizes key responsibilities.

The chart below shows the main areas of responsibility and expertise for each group associated with the team:

	TIG	UNLV	ALME	RMC
Project Management	X			
National Industry Research	х	х		X
Market Analysis	Х			
General Econometrics	Х			
Florida Econometrics/Tourism	Х		х	
Social Impacts	х	х	x	
Regulatory and Tax	x	x		Х

Notwithstanding the diversity reflected in the Project Team, as the Lead Project Manager, The Innovation Group will take responsibility as it has in this submittal for organizing the Project Team's efforts and coordinating inputs and outputs that will intersect throughout the process. The Innovation Group projects team is set apart by it depth of experience, both by client/project type and volume of scope. We have experience working with government entities/agencies, banking institutions, industry operators, tribal governments, and other industry players, and have managed country-wide, statewide and regional assessments, as well as stand-alone property developments as large as \$20 billion.

## THE INNOVATION GROUP (Project Lead)

The Innovation Group is the premier provider of consulting and management services for the gaming, hospitality, leisure and entertainment industries. Our inventive, forward-looking staff of professionals is known throughout the industry for the accuracy of our market forecasts and our timely response to client's needs. Among our core services, we provide feasibility studies, economic impact studies, market assessments, strategic and financial planning, operations and marketing advisory services, and traffic impact analysis of the highest quality. Expanded capabilities are offered through the Innovation affiliates.

As new gaming markets have emerged and as developed markets have faced new challenges, The Innovation Group has been engaged to provide our services throughout the globe. The Innovation Group and its affiliates have worked directly with governmental agencies, providing strategic planning and studies to aid in structuring new gaming jurisdictions, establishing regulations and privatizing state-run operations. We have also worked behind the scenes of many of the world's largest gaming, entertainment and hospitality developments, and our client list includes the most successful operators in the industry. Public and private owners, government agencies, more than 100 Native American Tribes, developers, financial institutions, professional associations and private equity investors have all benefitted from our expertise.

In addition, as emerging markets throughout the country have looked to gaming to enhance the economic benefits to both states and the properties that operate within them, The Innovation Group has been at the forefront of market analysis and research. Our diverse capabilities and gaming specialization have allowed us to contribute to a wide range of considerations regarding gaming expansion and development - from revenue projections and project sizing to amenity mix and economic/social impact.

As a result of these diverse capabilities and industry expertise, we have collectively worked in more than 100 major gaming jurisdictions, conducted research on all relevant gambling industry segments (casino resorts, slot parlors, racinos, racetracks, VLTs, Class II vs. Class III, bingo, lottery, internet gaming, and even emerging ambient devices including internet kiosks, mobile raffles, etc.), provided our services in nearly 80 countries throughout the globe, and been associated with nearly \$75 billion in investment decisions specific to our target industries.

The Innovation Group's broad range of expertise and experience gives clients a comprehensive approach to project development from start to finish. Since 1990, our clients have benefited from personalized service that is consistent in quality yet customized for the unique attributes of each project. The Innovation Group utilizes the most reliable data sources available—including

public agencies, GIS software tailored to the leisure industry, on-line databases, and local primary research—to evaluate markets and project feasibility. For market and feasibility studies, we utilize our proprietary demand assessment model, supplemented by gravity analysis for highly competitive markets. We are supplementing that expertise with the diverse resources of our Innovation affiliates, particularly with regards to the construction (phasing, cost estimating, etc.) and marketing (brand value) considerations, food and beverage strategies, amenity and program alternatives, and other key drivers of the scope of work.

Whatever the nature of the assignment, our reports - ever sensitive to changing conditions and emerging or untapped opportunities - help capture the full dynamics of the marketplace. And we have the planning and operations experience to assist a project through the development phase, pre-opening, ongoing operations, and beyond.

## UNIVERSITY OF NEVADA LAS VEGAS - INTERNATIONAL GAMING INSTITUTE

The UNLV International Gaming Institute (IGI) was founded in 1993 to serve as the intellectual hub for the global gaming industry – and indeed, twenty years later - the IGI boasts program graduates who lead gaming businesses and governmental agencies in more than 50 different jurisdictions. What is more, the IGI's global reach is growing in scope every year. This coming May, for instance, the IGI will co-host the world's most prestigious gaming research conference: the 15<sup>th</sup> International Conference on Gambling & Risk Taking (an event that dates back to 1974, and that will include over 400 attendees from six continents).

UNLV International Gaming Institute faculty have provided research-based expertise and testimony in front of many governmental entities, including the U.S. Senate, the Nevada State Legislature, the Nevada Gaming Control Board, the Nevada Gaming Commission, the Nevada Governor's Office, the Clark County Commission, the Las Vegas City Council, and government officials and/or cabinet-level officials in Canberra, Australia; Kaoshiung, Taiwan; Athens, Greece; Cape Town, South Africa; Alberta, Canada; Sydney, Australia; Moscow, Russia; Singapore; and Seoul, South Korea. Meanwhile, its grant-funded research has yielded more than \$2.5 million in sponsored projects, on projects covering everything from internet gaming policy to responsible gaming technologies. Overall, UNLV boasts the largest and most productive gaming research faculty in the academic world, as its professors frequently publish in the top journals in both the business sciences and the social sciences, while also editing the leading peer-reviewed gaming business journal, *UNLV Gaming Research and Review*.

On a day-to-day basis, the IGI often takes to the road to offer major educational programs to government leaders in Asia, Australia, Africa, Europe, North America, and Latin America. These "global tours" have included some highly interesting stops, all of which demonstrate the reach and quality of the institute's educational mission. To cite just one example, the IGI recently hosted The Pan-African Regulator Summit, a symposium for gaming regulators from ten countries from all over the African continent. The weeklong program, presented in Johannesburg, South Africa, included extended day-long presentations by IGI Executive Director Dr. Bo Bernhard as well as the Chairman of the Nevada Gaming Control Board, A.G. Burnett. These kinds of partnerships reveal the degree to which the IGI's expertise is in demand all over the world, even as the gaming industry evolves into new and dynamic jurisdictions.

Finally, the IGI's elite international reputation is perhaps best reflected by its invitations to deliver over 200 keynote addresses at virtually every major academic and professional conference in this field including the International Association of Gaming Regulators, the Global Gaming Expo (at both the Asia and US events), the Canadian Gaming Summit, the National Conference of Legislators from Gaming States, the Canadian Responsible Gaming Horizons, the European Association for Gambling Studies, the National Association for Gambling Studies (Australia), the Asian Problem Gambling Conference, the South Korean National Problem Gambling Conference, the U.S. National Council on Problem Gambling, and the U.S. National Center for Responsible Gaming – and at many more regional gatherings all over the world.

The team members from UNLV will work alongside The Innovation Group and other Team Members to focus on research, social impact, regulatory and tax considerations of the scope of work, including special focus on responsible gaming issues.

#### ARDUIN, LAFFER & MOORE ECONOMETRICS

Arduin, Laffer & Moore's (ALME's) supply-side approach to the most pressing policy matters of our time promotes the preservation of free enterprise. However, the true value of ALME's distinctive research lies in the innovative methods and accurate designs that they employ to solve these problems, derived from over four combined decades of experience among its leadership in advising governments and private entities on long-term economic decisions. It is through the application of this expertise in economic and budget research at the government, private, and academic levels that Arduin, Laffer & Moore is able to provide industry-leading proprietary analysis, investment models, and unique supply-side perspectives on global macroeconomic workings, including in-depth analysis of specific industry sectors, states, countries, companies and projects on subjects as varied as federal stimulus spending, national health care, pensions, tax policy, economic development policy, outsourcing, energy policy, and regulatory issues.

The team members from ALME will work alongside The Innovation Group and other Team Members to focus on econometric, research and social impact considerations specific to the state of Florida.

#### REGULATORY MANAGEMENT COUNSELORS, P.C.

Regulatory Management Counselors, P.C. (RMC Legal) is a gaming law firm made up of legal, business, governmental and public relations professionals able to service the diverse needs of its clients. The company has over 45 years of combined professional experience servicing the legal and regulatory needs of governments, businesses and individuals. RMC Legal has been involved with the expansion of gaming activity in many states and is uniquely suited to work with clients like the Florida Legislature to ensure that state-specific issues are addressed and balanced with the standards and practices of the wider gaming industry. Furthermore, RMC Legal's approach ensures that institutional knowledge of the gaming industry at large, both domestic and foreign, is incorporated in its efforts to assist clients in developing effective business and compliance strategies.

Effective gaming regulatory compliance requires a systematic approach. RMC Legal has worked extensively with clients in both the public and private sectors, allowing its professionals to appropriately address issues that are unique to the gaming industry. By understanding the various

perspectives of both regulatory bodies and gaming industry firms, the professionals at RMC Legal can tailor policies and programs that have been developed over years of experience handling gaming-specific matters. RMC Legal also has strong working relationships with groups such as the American Gaming Association, National Center for Responsible Gambling, Global Gaming Business Magazine, the Global Gaming Expo, and other industry voices that allow for coordination of research and policy projects amongst a vast array of gaming professionals.

RMC Legal has a keen understanding of the legal and regulatory landscape facing both commercial, foreign, and tribal regulatory agencies. In this respect, the firm's professionals have assisted governments in conceptualizing initial policy directions, drafting and amending regulations, working with development agreements to obtain necessary local authorizations, educating state and local officials on various facets of the industry, as well as generally working as an interface between a gaming regulatory agency and its regulated community.

The team members from RMC will work alongside The Innovation Group and other Team Members to focus on regulatory and tax issues within the ITN scope.

## 6.2.1.2.a (3) - Distinguishing Strengths & Qualifications

#### **VOLUME & DIVERSITY OF INDUSTRY EXPERIENCE**

The Innovation Group's national gaming and tourism industry knowledge is second to none. Our staff has authored the vast majority of casino and resort studies done domestically over the past 15 years, and we are the "go to" firm for the *Who's Who* of leading gaming operators. From the guidance we provide to other state legislative bodies to the research we have compiled for the largest of international gaming developments, The Innovation Group is the undisputed leader in gaming industry observation and forecasting.

### APPROACH & RESOURCES

We hire industry superstars that bring a breadth of experience and owner perspective for all aspects of gaming and hospitality operations. From finance and management to marketing and facility build-out, our assessments and reports address the entire array of considerations most important to our clients. Our aim with every project is to provide value-added services that are only made possible by the diverse structure and capabilities of our organization. While there are many firms who can generate demographic research and market analysis, The Innovation Group is unique in that it takes its solutions a step further to cohesively and accurately incorporate such complex factors as existing competition, brand value, appropriate amenity mix and the outcome/impact of developing multiple facilities.

The Innovation Group invests more than any industry consulting entity to ensure we are utilizing the most current and reliable data sources available. Such resources include public agencies, Smith Travel Research, Claritas, GIS software tailored to the leisure industry, on-line databases, and other local primary research tools to evaluate markets and project feasibility.

## **GRAVITY MODEL DEVELOPMENT & INTERPRETATION**

A gravity model is the ideal tool to assess the relative performance of existing gaming properties as well as the potential impact of a new facility upon existing ones. Experience with gravity modeling is critical to the Florida Legislature assessments since multiple locations and scenarios are being considered. The Florida Legislature can rest assured knowing that The Innovation Group is the industry leader when it comes to using gravity models to quantify the effect of distance on the behavior of a potential patron or to consider the impact of competing venues.

The Innovation Group further distinguishes itself with the level of detail to which we develop our models, as well as the enhanced interpretation methodologies we have mastered by applying the application to gaming projects throughout the globe. And critical to this assignment, we have proven experience applying this tool for gaming projects throughout the state of Florida.

#### ITERATIVE METHOD/PROCESS

The complexities of the assignment (due to the multiple locations under consideration, competitive market factors and various market scenarios being assessed) will require numerous interpretations of the gravity model. The Innovation Group will apply its iterative process to optimize the financial and econometric analysis so as to accurately consider all of the potential influences on the financial forecasts. We refer to this step as iterative in that we apply a wide range of techniques to "revisit" and analyze the data - successive, repeating and/or overlapping approximations - to obtain more accurate solutions and to cohesively pinpoint outcomes based on the maximum consideration of variables, scenarios and data. The result is findings that consider all factors holistically.

#### THE MOST TRUSTED FINANCIAL FORECASTING IN THE INDUSTRY

The Innovation Group has worked in more than 100 major gaming jurisdictions, conducted research on all relevant gambling industry segments, and been associated with nearly \$75 billion in investment decisions specific to our target industries. Our financial analysis and forecasting has been trusted and relied upon by the industry's most successful operators, as well as gaming analysts, investment houses, financial institutions, private equity investors and more.

## 6.2.1.2.a (4) - Clarification of Areas of Specialization & Responsibility

The RFP issued by the Florida State Legislature outlined dozens of critical tasks for Part I that we believe can be summarized by the following primary categories.

- · Nation, Regional and State-Specific Research
- · Market Analysis
- · General Econometrics
- · Florida-Specific Econometrics & Tourism
- · Social Impacts
- · Regulatory & Tax Issues



	TIG	UNLV	ALME	RMC
Project Management & Primary Point of Contact to the Legislature	X			
National, Regional & State-Specific Research	X	X		X
Market Analysis	X			
General Econometrics	Х			
Florida-Specific Econometrics & Tourism	X		Х	
Social Impacts	X	X	X	
Regulatory & Tax	X	X		X

TIG = The Innovation Group UNLV = The University of Nevada Las Vegas, International Gaming Institute ALME = Adruin, Laffer & Morre Econometrics RMC = Regulatory Management Counselors, P.C.

## 6.2.1.2.b Summary of Similar Projects

The Respondent shall include evidence of its qualifications and capability to provide the services in the Scope of Work for Part I of Two-Part Study described in this ITN by describing its organizational background and experience.

The description shall include:

(b) A summary of projects administered by the Respondent similar to the one outlined in Part I of the Two-Part Study. The summary shall include the outcomes of each project, including barriers/complications and how they were resolved;

The Innovation Group and the Project Team have been engaged to provide comparable services throughout the globe, completing hundreds of gaming related assessments a year. We have worked directly with such U.S. states as: New Hampshire, Nevada, Michigan, Massachusetts, Nevada, and Pennsylvania, providing them with strategic planning and studies to aid in structuring new gaming jurisdictions, establishing regulations and privatizing state-run operations. Outside of the United State, we have worked with a number of governmental agencies, including the Governments of China, Jamaica, Costa Rica, Bermuda, Panama, Canada and its provincial entities such as OLG and the Manitoba Lottery Commission.

Along with our affiliates, we have been behind the scenes of many of the world's largest gaming, entertainment and hospitality developments, and our client list includes the most successful operators in the industry – OLG, Manitoba Lotteries, Harrah's/Caesars, Wynn, MGM, Las Vegas Sands, Isle of Capri, Boyd Gaming, Penn National, Hard Rock Café, Planet Hollywood, Hilton, Hyatt, and more. We have worked with more than 100 Native American Tribes and First Nations, public and private owners, developers, financial institutions, professional associations and private equity investors.

The list of projects examples represents a sample of The Innovation Group Project Team's government and legislative work to date. A more comprehensive list of government and legislative projects is located in Appendix "F". The projects are listed in chronological order from most recent to date.

## 6.2.1.2.b (1) - Gaming Experience by Jurisdiction

Our team brings an extensive volume of experience to this assignment, with our firm and staff having conducted analysis relative to the following jurisdictions:

Algeria Latvia Antigua Lebanon Macau Argentina Aruba Mexico Australia Micronesia Bahamas Monaco Barbados Mongolia Belize Morocco Bermuda Nicaragua Cambodia Nigeria Canada N. Mariana Islands Chile Panama China Peru Colombia Philippines Costa Rica Poland Croatia Puerto Rico Russia Cyprus Czech Republic Scotland Egypt Singapore El Salvador Slovak Republic Estonia South Africa France Spain Germany Sri Lanka St. Croix Greece Guam St. Lucia Guatemala Switzerland Hungary Taiwan Tanzania India Ireland Trinidad Isle of Man Tunisia Israel Turkey Turks and Caicos Italy Jamaica Ukraine Japan United Kingdom Jordan United States Kazakhstan Uruguay Korea Venezuela Kurdistan Vietnam

Laos

Virgin Islands

# 6.2.1.2.b (2) - Representative Projects Featuring Summary, Outcomes & Unique Complications Overcome

#### State of Illinois

**Summary:** The Innovation Group recently completed work for the Office of the Governor, Patrick Quinn. The project included analyzing multiple development scenarios and tax structures to determine the optimal strategy for casino expansion in the state. We worked closely with the Governor's office staff to ensure that our analysis matched the evolving nature of the negotiations between the Governor and the state legislature. This work was completed as a continuation from a previous project for the state that included analyzing the impacts of the Lottery and ambient video lottery terminals (VLT's) being introduced across the state.

**Outcome:** The Governor has used The Innovation Group's analysis to guide the actions of the office as it evaluates all of the potential legislative actions for expanded gaming in the state.

**Complications:** The development scenarios, sizing parameters and tax structure for the expansion to gaming in the stated were constantly evolving de nature of the discussions and negotiations between the governor and the state legislature. In order to be responsive to these changes and provide up to date results, we made our staff available and flexible to the needs of the Governor's Office. The ever evolving development scenario required our staff to be diligent with the modeling process in order to make sure that the correct results tied to each iteration of the discussion and negotiation.

#### State of Massachusetts

**Summary:** The Innovation Group was tasked by the State Senate of Massachusetts to evaluate several development scenarios based on pending legislation to enable casino gaming in the Commonwealth. The State Senate request included the preparation of a tax and regulatory discussion providing competitive intelligence into other jurisdictions, recommendations on specific legislative elements based on the Commonwealth's goals, and their fiscal impacts. Statewide gaming revenue estimates forecasted the gross gaming revenues and job creation that could be generated under a number of development scenarios. The revenue estimates were further evaluated to answer two key policy questions: the amount of revenue that would have accrued out of state in the absence of enabling legislation and the impact that casino gaming would have on the lottery.

**Outcome:** Based on the recommendations and conclusions in our report, the State Senate of Massachusetts drafted legislation that created three development zones for large scale casino developments in the state. The tax and regulatory discussion in our report was included in the final legislative proposal that the Governor signed into law.

**Complications:** The legislation being considered was expansive and scope and included a large amount of stakeholders, including our client, the Massachusetts State Senate and the potential developers and the Native American Tribes. Because of the different goals of each stakeholder, we developed a model that allowed us to evaluate multiple scenarios and

iterations. The outcome of our modeling provided results that showed the full gaming potential to maximize the state's tax revenue potential while weighing the feasibility of the casino developments across the state.

### OLG: Greater Toronto Area Market Assessment

Summary: The Innovation Group provided a market assessment for the greater Toronto Area (GTA), considering the 27 gaming facilities across Ontario (4 resort casinos, 17 racetrack slots and 6 charity casinos). To complete the scope of work, we referred to previous market studies and existing performance data, to consider opportunities within the GTA to further maximize revenue and profitability at some GTA gaming facilities. Particular consideration was offered to the long term future of Casino Rama, as well as general cannibalization consideration for all OLG locations. We reviewed the supply and demand for GTA gaming facilities and developed a market assessment for the GTA that clarified which areas of unmet demand could be defined in a variety of scenarios. The key objectives of our analysis were to determine the unmet demand (gaming revenue) within the GTA, estimate gaming demand and cannibalization impacts, based on a variety of scenarios to be determined together by OLG and The Innovation Group, and determine the optimal scenario(s) for best capturing this unmet demand, including supply requirements and resulting gaming revenue impacts. OLG also asked us to explore various sizing options with respect specific properties.

**Outcome:** Based on the results and recommendations in our report, The Ontario Lotteries and Gaming commission has initiated its privatization and modernization program for more than 25 casinos and slot clubs in the Greater Toronto Area.

Complications: In order to comprehensively address the gaming revenue potential for the market, The Innovation Group had to determine a solution to estimate the latent demand in the market. The latent demand is not usually addressed in projects like this because of the complexity needed in order to estimate the potential. We established a methodology that addressed the maximum potential demand in the market based on comparables from other mature operating markets in the world. In order to accomplish this we created a metric that estimated the average gaming spend per adult and benchmarked this spend against comparable mature markets to establish the maximum.

## Pennsylvania Statewide Table Game Analysis

**Summary:** In 2009, on behalf of several casino operators, The Innovation Group assessed the revenue potential that table game operations would generate in the Commonwealth of Pennsylvania. Our services included a statewide economic impact study evaluating the benefits to the Commonwealth from the introduction of table games, as well as testimony to the legislature regarding our findings. Key to allowing this program to proceed was convincing the legislature to assess a low tax rate on table games which they eventually accepted. In addition we projected increase in slot revenue as a result of companion play.

Outcome: Based on the conclusions in the report and testimony, the state legislature passed a bill that allowed for table games to be introduced at casinos at a competitive tax

rate. The lower tax rate bill spurred development at the casinos which included capital improvements to the casino floor and non gaming amenities including food and beverage and hotel development.

**Complications:** On the outset of the report, the state legislature was seeking a tax rate and structure that would have been prohibitive to the growth of the gaming industry in the state of Pennsylvania. In order to realign the stance of the legislature, The Innovation Group relied on our expertise to show both the numerical explanation of the issue as well as the expository writing to relay the point.

## City of Philadelphia, Philadelphia Gaming Advisory Task Force Advisory Services

Summary: The Innovation Group was engaged to complete comprehensive analysis of the proposed new slot operations in the city and to make recommendations as to the city's oversight of these facilities. The input we provided aided officials in understanding a range of issues related to the operations so that they could more proactively take part in the development of the new industry. Our work included performing site analyses for 11 sites, developing market assessments and revenue projections for 14 scenarios, developing 28 pro formas, estimating local and overnight modal splits, estimating the fiscal impacts of problem gambling and impacts of crime and providing secondary research on trends in gaming. As primary consultants, we also oversaw the work of other consultants including input into the design and analysis of surveys and focus groups, and input into traffic impact assessments. The Innovation Group won this coveted contract through an open bid process.

**Outcome:** The city used our recommendations in the report to assign two locations for potential casino development. One of the locations is currently developed and operating as one of the state's highest revenue generating casinos.

Complications: There two main complications with this project, (1) the management of the all of the subcontractors and (2) addressing the needs of the various stakeholders on the city's development and oversight committee. In order to manage the many sub contractors on this project, The Innovation Group utilized a comprehensive timeline and communication strategy that allowed all of the subcontractors to be able to complete their tasks in a timely manner. In order to address all of the stakeholders, The Innovation Group created a communication protocol that allowed the committee members to voice their opinions and concerns and the results were addressed and included in the reports outcome and recommendations. The committee members felt their concerns addressed based on the outcome of the report.

Pennsylvania Statewide Market Assessment, Senate Democratic Appropriations Committee

**Summary:** In support of a bill that became the basis for subsequent gaming legislation and a state goal to generate \$1 billion in revenue, The Innovation Group conducted a gaming market analysis (using a gravity model at the statewide level) to determine the number, size and location of gaming licenses for 12 proposed facilities. Multiple scenarios were addressed in order to determine the distribution which would maximize state tax revenues and ensure viable developments. The report also included a financial analysis of the break-even point for development given a proposed \$50 million license

fee and construction and financing costs. The recommendations of the report were eventually accepted by the state and incorporated into legislation. Following the passage of the bill, The Innovation Group also took a lead role on Philadelphia's Gaming Advisory Task Force to recommend optimum locations for gaming facilities in the city.

**Outcome:** Legislation was drafted and passed through the state legislature based on the outcome and recommendation from The Innovation Group Report. The report identified the proximate sizing and location of casinos in the state that would generate over \$1 billion in gaming tax revenue. Subsequent to the development of the casinos the state has received over \$1 billion in total tax revenue.

Complications: It was not feasible to create a single model to project revenues and outcomes for the entire state due to the competition from surrounding states, the number of potential sites and venues and the dichotomy of the population in the state that was split between the eastern and western portions of the state. In order to overcome this issue, The Innovation Group created two separate gravity models that bifurcated the state and worked in tandem to generate the results and outcomes.

## 6.2.1.2.c Sample of Respondent's Work Product

The Respondent shall include evidence of its qualifications and capability to provide the services in the Scope of Work for Part I of Two-Part Study described in this ITN by describing its organizational background and experience.

The description shall include:

(c) A sample of the Respondent's work-product on a project similar in nature, size and scope; and

We have provided a sample of our work product in Appendix "G" of this response. Below is a summary of the project scope:

## 6.2.1.2.c (1) - Sample Deliverable

## Government of Bermuda and the Bermuda Hotel Association (BHA)

The Innovation Group was engaged to provide consulting services to the Bermuda Government and the Bermuda Hotel Association regarding the potential implementation of gaming in Bermuda. This highly visible project involved working for a combined public/private client (a joint effort between the Government of Bermuda and the local Hotel Association) and was of a highly comprehensive and complex nature. In order to help determine the potential and methodologies for the tourism-focused jurisdiction, we applied a series of qualitative and quantitative tools including a gaming market assessment, a legislation study, tax considerations, and economic / social impact assessments.

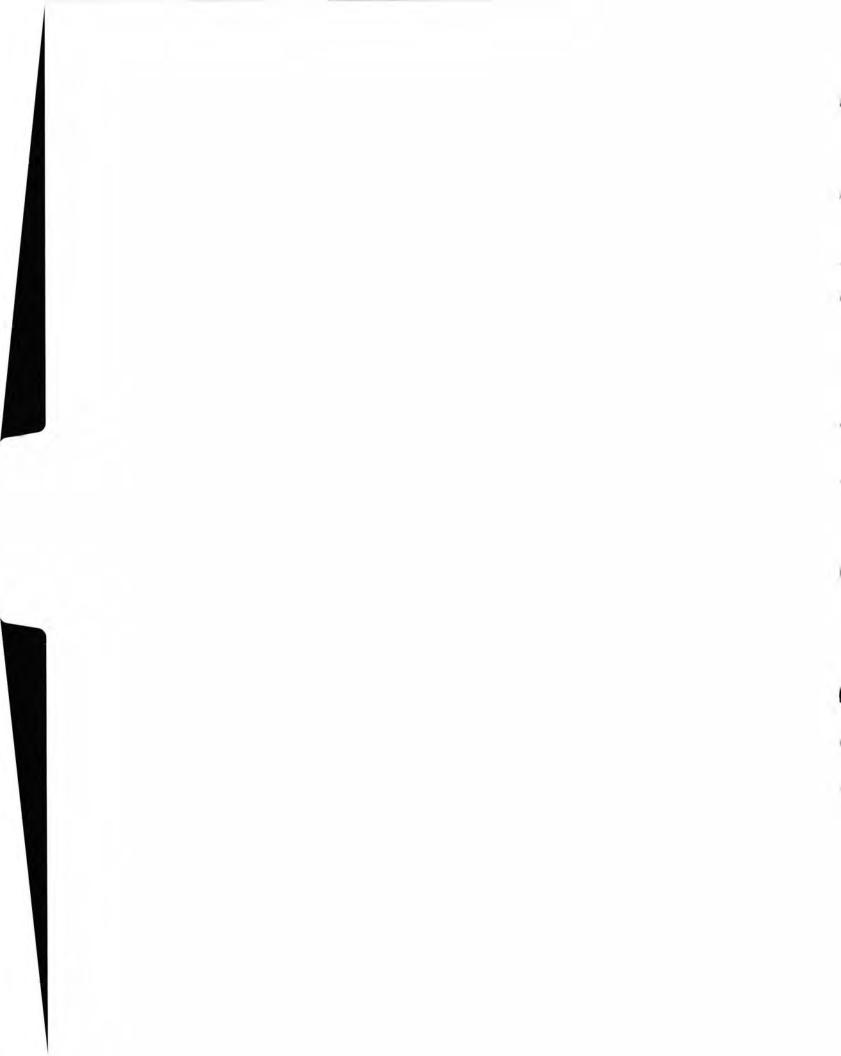
## 6.2.1.2.d References

The Respondent shall include evidence of its qualifications and capability to provide the services in the Scope of Work for Part I of Two-Part Study described in this ITN by describing its organizational background and experience.

The description shall include:

(d) A minimum of three references (and a maximum of five references) for which the Respondent has performed work similar in nature, size and scope to that described in this ITN. The Respondent shall also include contact information for each reference using Attachment D.

Please see Attachment "D" as requested by the ITN.



# 6.2.1.3.a Approach, Methodology & Implementation Plan by Task

The Respondent shall include a Project Plan that explains the proposed approach and methodology to be used to perform Part I of the Two-Part Study. The Project Plan must include a preliminary implementation plan for the entire project that, at a minimum, includes a timeline for accomplishing significant interim steps in Part I of the Two-Part Study. The Project Plan must also identify and describe the relevant background of the staff and any contractors that Respondent proposes to use in connection with its work on the contract.

Please note that the modified numbering system below is based upon the outline for Section 7 – Scope of Services beginning on Page 11 of the ITN.

# (7.A) Part I, Deliverable 1 - Assessment of the Florida Gaming Industry & Its Economic Effects

A general description of gambling in terms of popularity, profitability, regulatory considerations, and cost mitigation, including not only industries currently operating in Florida but also other gambling activities such as table games, internet poker, destination resort casinos, and sports betting.

#### 7.A.1.a - GENERAL DESCRIPTION OF GAMING

In order to describe the general characteristics of gambling (or "gaming" in instances of certain methodological or business references) nationally, including in Florida and Native American lands, The Innovation Group will examine domestic gaming trends in the form of visitation and gaming revenue based on publicly available statistics; its own published research; *Portrait of American Gamblers*, a nationwide survey conducted by The Innovation Group; third party research regarding gaming habits in the US; and The Innovation Group's proprietary database of projected propensities and frequencies of gaming for the US including Florida.

In establishing a basic understanding of the popularity of gambling in the US, including Florida and Native American lands, The Innovation Group will examine the industry's popularity within the following industry segments:

- Full Casinos Including Table Games
- · Slot-only Casinos/Racinos
- Independent Table Games Operations
- Destination Resort Casinos
- Pari-mutuel tracks or jai alai
- Sports Betting
- Internet Poker

 Other forms were applicable (including Lotteries, VLT's, Bingo, Arcades/Sweepstakes, Internet Based Terminals, etc.)

## 1. Industry Development and Growth Trends

To examine the popularity and characteristics of these forms of gambling and gaming establishments, The Innovation Group will first detail the operating characteristics and performance of traditional bricks and mortar casinos in different jurisdictions and facility types, and establish development and growth trends. Next, The Innovation Group will further define the characteristics of hybrid or more specific formats of gambling including slot-only venues and destination casinos including the results, if any, of their impact on tourism. Subsequently, The Innovation Group will review the emergence and presence of ambient forms of gambling including, but not limited to, VLT's (Video Lottery Terminal), sports betting, and internet and related forms. Here The Innovation Group will establish where such forms of gambling are legal and how the industry has trended over the last decade.

## 2. Profitability

After examining the growth and popularity of gaming types, The Innovation Group will examine the profitability of individual enterprises and companies. To do this The Innovation Group will rely on several metrics, the most prominent being EBITDA (earnings before interest, taxation, depreciation and amortization), commonly used in the industry to understand the earnings of gaming companies on a standardized basis. In addition The Innovation Group will consider profitability of gaming enterprises and companies after-tax and after debt service, to set the stage for later aspects of this assignment that will consider the ROI (return on investment) based on sensitivities where tax and interest rates will be variable.

## 3. Regulatory Considerations

After assessing the profitability of gaming, The Innovation Group, with input from RMC Legal, will broadly review the different regulatory trends that have defined gaming markets, explaining how jurisdictions have adapted to the changing landscape of gaming offerings over time. Finally the actions of such bodies to maintain competitiveness and relevance nationally and in Florida will be reviewed. This assessment will inherently include an introduction to the role of tax rates, up-front payments, exclusivity, and other key regulatory variables.

#### 4. Cost Mitigation

Lastly, The Innovation Group will examine how the industry, including The state of Florida, might mitigate the costs of expanded gaming such as problem gambling, police and emergency services, infrastructure maintenance, and related impacts. This will include an examination of how new tax revenues gained through gaming might offset the costs of increase public services needed to properly support casinos and other gaming activity.

The results of the above assessments of the industry's profitability, regulation and cost mitigation will be detailed in report form comprising both written descriptions of findings and applicable tables, charts, and graphs including all revenue, profitability, and visitation statistics where applicable, and secondary data with all sources.

### 7.A.1.b - GENERAL DESCRIPTION OF REGULATORY SCHEMES

A general description of gambling regulatory schemes including: (1) state-operated, consolidated agency oversight, multi-agency oversight, and the use of local and state commissions; (ii )authorizing and revocation mechanisms; and (iii) taxation schemes.

To build on the introduction to regulatory considerations covered in (a) above focusing on structures, rules and taxation schemes RMC Legal will complete the following steps:

- Research regulatory schemes via internal records, proprietary industry reports, statutory and regulatory constructs, scholarly articles, industry contact interviews, and general media research.
- Research and draft a description of Native American compacting and exclusivity considerations based upon national and Florida specific trends.
- Review existing legalized and operating forms of gaming in Florida and the regulation there of.
- 4. Review conclusions of findings with the team of advisors related to taxation schemes and the regulatory implications of differential approaches to regulation.
- 5. Draft narrative descriptions of different regulatory schemes used throughout the US.

In addition to the steps listed above, RMC Legal, with support from the UNLV, will also provide a distillation in lay terms of academic considerations behind choice of gaming tax structure, with the following areas of emphasis:

- 1. Pigouvian taxes: Taxing gaming at a rate higher than would normally be considered economically efficient due to the negative externalities associated with problem gambling.
- Ramsey based taxes: Economically efficient justification for taxing gambling at a high
  rate since demand for gambling is typically quite inelastic, and higher tax rates will not
  curb consumption as significantly. The desire to do this is abated in casino gambling
  (versus say lotteries) since there are more indirect economic benefits, such as increased
  tourism.
- License fees or gaming revenue fees: What are the economic implications of using a taxation model that predominantly relies on GGR taxes vs. annual license fees or entrance fees.
- 4. Tax incidence: How do the above tax structures affect problem gamblers and non-problem gamblers differently? How do they affect lower income and higher income groups differently?

#### 7.A.1.c - TRENDS & BEST PRACTICES

A general description of trends and best practices in governance and regulation of gambling activities

The discussion of best practices in regulation and governance will include input both from RMC Legal, related to the administration of regulations, and from the UNLV as related to facilitating responsible gaming while addressing problem gaming.

RMC Legal will complete the following steps covering best practices in regulation:

- Analyze assembled research and conclusions obtained from an industry review related to industry standards and practices; with an outline of the application of the metrics used to achieve best practices specific to the state of Florida.
- Outline regulatory changes occurring across the US and trends that Florida should consider as part of its examination of gaming expansion and consolidation of regulatory oversight.
- 3. Consult with team of advisors based upon conclusions of market analyses and implications on regulatory practices/structures specific to Florida.

Simultaneously, UNLV will address best practices for responsible gambling, which have been identified generally through academic research in the field of problem gambling and through practice standards developed in gaming jurisdictions around the world. Such studies will be cited as relevant in targeting important aspects of responsible gambling practices in gambling operations, and based on a strategic framework known as the RENO model. These standards consist of the following eight content areas, including:

- 1. Responsible Gambling Policies
- 2. Employee Training
- 3. Informed Decision Making
- 4. Assisting Players
- 5. Self-Exclusion
- 6. Advertising and Promotion
- 7. Game and Site Features
- 8. Access to Money

## 7.A.1.d - GENERAL DESCRIPTION OF GAMBLING AS A PUBLIC FUNDING SOURCE

A general description of gambling as a public funding source including (i) comparison of states' reliance on and uses of gambling as a public funding source;

ii. Reliability and predictability of gambling revenues; and

iii. Direct and indirect costs to the state.

Following the discussion and recommendations associated with regulatory schemes and best practices above, UNLV with the support of the Project Team, will focus on the nature and reliability of gambling revenue as a source of public funding, including an analysis of direct and indirect costs to states, compared to Florida in particular. The Project Team refers to the group of firms working together on this proposal including: The Innovation Group, UNLV, Arduin, Laffer & Moore, and RMC Legal.

First, a general description of gambling as a public funding source will be provided, informed by the industrial experience of the Project Team, an academic review of literature on the topic, and a summary of state gaming data. In particular, this data overview will highlight gaming revenue as a share of overall state revenue for each of the major forms of U.S. gaming. This data will be primarily acquired from the UNLV Center for Gaming Research housed within the World's largest collection of gambling literature at UNLV libraries system. Where necessary, fiscal gaming data will also be obtained from state gaming control agencies, state legislative budgets, and the Tax Foundation.

Reliability and predictability of gaming revenue over time will be assessed based on its annual variation as a function of the number and size of state facilities. With any projection of economic impacts, it is important to make any decisions based on what researchers call "the history effect" — which points out that, as always, significant historical events can render analyses dated and inaccurate. A useful exercise with respect to this concept is to look back as many years in the past as our team is forecasting in the future.

Using descriptive statistics, this section of the study will include an analysis of domestic gaming markets during the two greatest periods of economic stress in the U.S. economy over the past 20 years, the 2001 recession and Great Recession. These events both provide useful but different tests of potential impacts. The 2001 recession was intensified by the 9/11 terrorist attacks that reduced travel in general, and in particular to destination casinos. Dr. Bernhard has specifically published peer reviewed research on this topic. The Great Recession provides a different stress test on gaming volume, as it was a deeper recession with wider effects across sectors.

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<sup>&</sup>lt;sup>1</sup> These recession are defined by the National Bureau of Economic Research) as the periods from March 2001 to November 2001 and from December 2007 to June 2009.

<sup>&</sup>lt;sup>2</sup> Eisendrath, D., Bernhard, B. O., Lucas, A. F., & Murphy, D. J. (2008). Fear and Managing in Las Vegas An Analysis of the Effects of September 11, 2001, on Las Vegas Strip Gaming Volume. Cornell Hospitality Quarterly, 49(2), 145-162.

A general description of direct and indirect costs to the state will be provided. The direct cost discussion will include a conceptual overview of items such as regulation and auditing, while the indirect cost discussion will highlight potential costs associated with increased crime and demands on social services. Many of these costs are misunderstood in public debates, and members of the Project Team have written extensively on the actual empirical evidence pertaining to direct and indirect gaming costs.<sup>3</sup>

#### 7.A.1.e - GENERAL DESCRIPTION OF GAMBLING IMPACTS

A general description of gambling impacts including (1) social, criminal and personal; and (ii) short and long-term fiscal.

## Social, Criminal & Personal

The general impacts description will also be conducted by UNLV with support from the Project Team. This research section will begin with a general description and contextualization of the social costs of gambling will be provided, including an overview of conceptual difficulties, measurement issues, and bias that may be present in many studies. This discussion will include a description of the effect of gambling on crime; a discussion of the likely effect of gaming expansion on problem gambling, including an overview of the adaption and stabilization model in problem gambling literature and a discussion of the importance in distinguishing between gaming products, markets, and eras; and a discussion of gaming consumption by different income brackets (the tax regressivity/progressivity issue).

In general, the content of this aspect of the study will be informed by an academic literature review, including literature written by the members of the Project Team in peer-reviewed journals. Using this approach to data collection ensures that the content and recommendations provided within the report will be based on the most meaningful and reliable results available.

## Short & Long-Term Fiscal Impacts

In assessing the short and long-term fiscal impacts of gaming, such as the tax revenue generated from gaming in addition to the civic costs (police, fire, problem gaming, infrastructure, etc.) The Project Team will use both third party studies in addition to publically available fiscal information, such as the reported gaming tax revenue and an examination of how civic costs have increased based upon city and state budgets, to assess how state budgets have been impacted both immediately following the introduction of gaming and over a five year time period. The Innovation Group has typically found that gaming revenues reach a stabilized growth between two and three years after creation and thus the five year time window will allow for the examination of short and long term impacts. In addition, The Project Team will examine how gaming tax revenues have affected state and local budgets both in the near term and long term after the introduction or large-scale expansion of gaming.

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<sup>&</sup>lt;sup>3</sup> For example: Philander, K. S., & Bernhard, B. J. (2012). Informing the Public Debate: Academic Research on Social Costs and Casinos, available at: http://igi.unlv.edu/pdf/articles/InformingThePublicDebateSocialCosts.pdf; Philander, K. S., & Bernhard, B. J. (2012). Informing the Public Debate: Academic Research on Crime and Casinos, available at: http://igi.unlv.edu/pdf/articles/InformingThePublicDebateCrimeCasinos.pdf

## 7.A.2 - ECONOMIC ASSESSMENT OF STRUCTURE & PERFORMANCE OF FLORIDA'S EXISTING GAMING INDUSTRY

#### 7.A.2.a - GAMING SUB-SECTORS, SIZE & ECONOMIC IMPORTANCE

An analysis of gaming sub-sectors, their size and economic importance.

The assessment of the economic structure, impacts and performance of Florida's gaming industry will be lead by Arduin, Laffer & Moore Econometrics Inc. (ALME), and will measure the current gaming industry sector's contribution to the Florida economy. The gaming industry's contribution will be measured based on the total economic activity (gross revenue), income earned, number of jobs, and total state and local tax revenues. For perspective, these values will be presented in absolute terms and relative to the Florida economy.

With the current contribution of the gaming sectors and subsectors defined, ALME will then develop the timeline for the properties and gaming legislation in the state of Florida and connect the legislative timeline to the growth and development of the industry. This timeline will include size and scope of the facilities as well as gaming revenue generation over time. The operational and fiscal impacts created by these facilities focusing on income growth, job creation and tax revenue generation to the state.

#### 7.A.2.b - DIRECT, INDIRECT & INDUCED COMPONENTS

A description of the direct, indirect, and induced components of the economic and fiscal impact of each of the subsectors. Impacts associated with facility construction should be distinguished from impacts associated with ongoing operation of a facility.

Using ALME's definition of the gaming industry from part Section 2.a The Innovation Group will leverage this industry definition to explicitly measure the direct, indirect, and induced impacts created by each of the subsectors – with an emphasis on the on-going direct, indirect, and induced economic impacts (operations) of the sector.

The economic impacts will be measured using standard input-output models (IMPLAN) and emphasize the revenues, jobs, incomes, and fiscal impacts (tax revenue, etc...). IMPLAN uses classic input-output analysis in combination with regional specific Social Accounting Matrices and Multiplier Models, to provide a highly accurate and adaptable model for its users. The IMPLAN database contains county, state, zip code, and federal economic statistics which are specialized by region, not estimated from national averages, and can be used to measure the effect on a regional or local economy of a given change or event in the economy's activity.

To the extent there are currently any facility construction operations currently occurring, these impacts will be assessed separately due to the transitory nature.

### 7.A.2.c - CHANGES TO IMPACTS OVER TIME & FUTURE PREDICTIONS

An assessment of the changes in those impacts over time until the present day, historically, and projections for the future.

#### **Growth Over Time**

ALME will trace the development of the gaming industry documenting its growth over time. With the economic fundamentals, history, and contribution of Florida's current gaming industry defined, ALME will project possible future scenarios by linking the potential performance of the gaming industry to Florida's broader tourism industry under the alternative policy scenarios.

Continued growth tourism, a staple to the Floridian economy, requires continual investment into "Florida's tourism brand". Yet, regulations (discussed earlier in the proposal) may be creating artificial barriers to the gaming industry in Florida thereby diminishing potential investment. With less investment the state's tourism industry could be less competitive than possible.

From a projection perspective, it is important to note that the current gaming environment in Florida is a state-sanctioned and state-protected monopoly. Toward an illustration of the potential benefits to Florida's economy, ALME will evaluate whether the current government restrictions on the gaming industry are diminishing the potential growth for the state in practice as well as in theory.

This section will also document whether Florida has the assets and infrastructure that are deemed to be necessary to support a viable gaming industry. The determination of the necessary assets and infrastructure will be based on a review of other case studies where gaming currently exists. The case studies will review the impacts not only from major gaming areas, such as Las Vegas and Atlantic City, where the gaming industry has been legal for many years; but also the expansion of gaming in newer gaming jurisdictions, such as the riverboat gambling in Mississippi or the gaming industry in the Bahamas. The review will examine both the successes and, where relevant, failures to discern important aspects or features that are necessary for the gaming industry to meaningfully contribute to the economy.

The case studies will provide a detailed review of establishment changes (including restaurants, retail, etc.), jobs (defining the types of jobs increased on net), and overall economic activity. The resulting impact on government revenues will also be examined.

Based on the experiences of the case studies, and Florida's asset base, the analysis will project the potential economic impact for Florida.

# (7.B) Part I, Deliverable 2 - Assessment of Potential Changes & Economic Effects

## 7.B.1 - POSSIBLE CHANGES IN THE FUTURE

Scenarios to be evaluated include:

To assess changes in economic effects the scope of work will shift to a market and demand based analysis, which will lead to a series of scenarios to be applied in potential future economic outcomes. In this section The Innovation Group will take the lead, with support from the Project Team. The Innovation Group will customize methodologies drawing from demand based feasibility modeling, largely through our statistical models, financial analysis, and other analytical tools to identify optimal scenarios for the gaming industry throughout the state that meet government's goals. These may include, but are not limited to, increasing fiscal impacts, job creation, tourism growth and recapturing lost visitation to other outside markets. The analysis will be strategically designed to evaluate all commercially viable scenarios that could complete such goals while minimizing negative impacts to the state such as problem gambling, social and economic costs and sector cannibalization.

## 7.B.1.a – 7.B.1.j - AT MINIMUM OUR WORK WILL EVALUATE THE FOLLOWING BASE-SCENARIOS AS PRESENTED IN THE ITN:

- a. Renewal of the Seminole Tribe's exclusive authorization to conduct banked card games on Native American lands, as defined in the Indian Gaming Regulatory Act.
- b. Granting the Seminole Tribe exclusive authorization to offer table games on Native American lands, as defined in the Indian Gaming Regulatory Act.
- c. Regulating, prohibiting, restricting, and/or taxing simulated casino-style gambling at Internet sweepstakes cafes, areade amusement centers, or truck stops.
- d. Modifying or repealing live racing requirements for pari-mutuel facilities, including evaluation of impacts on purses and awards.
  - i. Thoroughbred racing.
  - ii. Harness racing.
  - iii. Quarter horse racing.
  - iv. Greyhound racing.
  - v. Jai alai.
- e. Changing tax rates for Class III games at pari-mutuel facilities.
- f. Adjusting restrictions on the number and operation of slot machines at pari-mutuel facilities in Miami-Dade and Broward counties.
- g. Authorizing pari-mutuel facilities in counties other than Miami-Dade and Broward to offer slot machines.
- h. Authorizing pari-mutuel facilities to conduct table games or other Class III games.

- Authorizing a limited number of casino/resort complexes in Miami-Dade and/or Broward counties.
- j. Authorizing a limited number of casino/resort complexes around the state.

The Innovation Group would note that these scenarios could be limiting in presenting all potential market situations that can best benefit the government. As such The Innovation Group will be evaluating additional scenarios in combination with those listed above through multiple iterations with consideration for the impact of different fiscal rates. For example, one combination could be an evaluation of the impact of table games at pari-mutuel facilities simultaneously with any additional resort development, taking tax variation and/or any up-front payments by resorts into account, while assessing any further effects on pari-mutuel revenue assuming shifts in live-racing requirements. Determining the appropriate number of scenarios and their components will be accomplished through the creation of a matrix associating the various scenario components with one another in logical combinations.

## **Gaming Market Assessment**

Given the framework discussed above, the impact assessment shall begin with a detailed historical trend analysis which would provide insight into the current Florida gaming environment. The purpose of the review of current performance and market positioning is primarily to provide context for analysis of the potential expansion and changes to the market. Based on this, The Innovation Group will then provide the future market impacts of all possible scenarios through the development of a statewide gaming demand model. Given The Innovation Group's previous experience in Florida, The Innovation Group not only has extensive knowledge of the market but The Innovation Group also has the ability to provide a thorough overview of its future potential building on our existing exposure to the market. This includes a collection of quantitative and qualitative research from inside and outside of Florida, partially listed below:

- a) Demand patterns reflected in current player behavior
- b) Proprietary data indices from Florida and comparable markets to current or potential future conditions in Florida Primary Research (surveys)
- c) Site Analysis (Site Visits)
- d) Interviews with existing staff members and executives
- e) Market specific industry studies

As noted before, The Innovation Group shall customize the approach within each scenario depending on the type of gaming entity being evaluated and the data retrieved. The Innovation Group will then develop statistical models to forecast demand based on one or more of the following methodologies:

Penetration Analysis – Modeling based on the consumer behavior of the local and tourist
population of the subject gaming offering or property, taking intervening and competitive
opportunities into account.

- Fair Share/Market Share Analysis Modeling based on a fair share analysis of the gaming market supply with premiums and discounts given to the subject property based on specific characteristics that relate to the nature of the market, the quality of the proposed asset and the proximity and quality of competitive assets.
- Comparative Analysis Modeling that projects subject property demand based on historical/existing/known data from comparable markets and/or facilities.

The Innovation Group would note that the market study will provide background information on the population demographics, regional economic conditions, tourism, and the transportation network as are salient to the analysis. This data will be utilized extensively in the analysis and summarized in tabular or other applicable formats in appendices to the report.

Within each model, The Innovation Group will assess gaming demand based on three main demand segments: The local market, transient tourists including existing, or base tourists as well as induced tourists and highway traffic intercepts. Segments can be broken down into greater detail and re-segmented in order to extract a higher level of detail from the analysis (i.e. VIP play vs. mass market play, leisure tourists vs. business tourist play, local and/or tourist demand by market origin). Below is a description of each of the demand segments and the typical approach used to evaluate them for any gaming entity (i.e. casinos, pari-mutuels, arcades).

## a) Local Market

Any gaming demand from the local or regional population is a function of the size of an area's adult population and the gaming participation rate for area adults. These include players at casinos, racetracks, pari-mutuels facilities, internet sweepstakes cafes, arcade amusement centers or truck stops. In order to determine the population base from which any of these types of gaming facilities in Florida currently or potentially attract gamers, The Innovation Group will first obtain data for the market area with respect to the eligible gaming population. These population estimates will be made by utilizing our subscription-based databank of the most currently updated geographic population database system available, which is tied to the U.S. census data (2013 estimates and 2018 projections).

The Innovation Group employs a number of techniques in deriving participation rates. Through experience in gaming markets throughout the U.S., as well as the our surveys of gamers nationwide, The Innovation Group has derived an econometric model that generates gaming factors which vary based on proximity to gaming venues, income characteristics, and market supply characteristics. More specifically, for the purpose of forecasting the local market component, The Innovation Group will create a complex gravity model. Using historical revenue data as a basis, our analysis will begin with the development of a series of gravity models that will be used in determining the gaming revenue potential for gaming venues in the state of Florida as a result of changes to the gaming environment described under each scenario. The impact modeling will consist of a three-step process:

1. Comprehensive historical trend analysis of the Florida gaming market, including impact of the current exclusivity act for Seminole Tribe of Florida and historical tax and regulatory changes to pari-mutuels in South Florida.

- 2. Revenue trend projection for the total Florida market using regression analysis to assess future revenues for a all potential scenarios.
- 3. Gravity model analysis to estimate the distribution of total market visits and revenues for each facility type discussed under each scenario as well as their impacts on each other.

Gravity models are commonly used in location studies for commercial developments, public facilities and residential developments. First formulated in 1929 and later refined in the 1940s, the gravity model is an analytical tool that defines the behavior of a population based on travel distance and the availability (or size of facility) of goods or services at various locations. The general form of the equation is that attraction is directly related to a measure of availability such as square feet (in the case of gaming facilities the number of gaming positions is used as a surrogate) and inversely related to the square of the travel distance.

The basic formulation is that the interaction between two or more gaming venues is based on Newton's Law of Universal Gravitation: two bodies in the universe attract each other in proportion to the product of their masses and inversely as the square distance between them. Thus, expected interaction between gaming venue i and market area j is shown as: where Pi = the gaming positions in gaming venue i, Pj = the population in market area j, dij = the distance between them, and k = an attraction factor relating to the quality and amenities to be found at each gaming venue in comparison to the competing set of venues. When this formulation is applied to each gaming venue gaming trips generated from any given zip code are then distributed among all the competing venues.

In summary, the gravity model quantifies the effect of distance on the behavior of a potential patron, and considers the impact of competing venues. Thus the gravity model is an ideal tool in assessing the impact of a new facility upon existing facilities.

As in other gaming markets, the local market revenue potential is a function of three factors. The first factor is the size and socio-economics of the adult population living within day-trip distance from any gaming facility type. This geographic area is designated to include those persons living within a reasonable travel distance from a gaming venue, and reflects the impact of other casinos that would provide attractive alternatives for potential patrons. This area will be illustrated graphically on a map and will take into consideration the existing highway network and natural boundaries.

Propensity and frequency are the other two factors that make up a gaming market analysis. Propensity is the percentage of the adult population that will visit a gaming facility and frequency is the average number of annual visits made by all gaming patrons. These factors can be applied to the adult population of the gaming market to determine the number of total possible visits in the region. Research by The Innovation Group into gamer behavior around the country has shown that propensity and frequency factors vary not only by travel distance but also by the type, size, games offered, and number of gaming venues available in the market. An appropriate set of participation factors will be selected based on a comparative analysis of actual gaming behavior in other gaming markets and secondary data obtained for other gaming operations.

Gamer visits for each market segment will then be subject to an estimate of average "win" or hold per patron. In this analysis, historical per capita revenues from other comparable gaming facilities will be utilized to estimate win per patron for the market as well as variations in spending habits and income levels between the region surrounding the subject facilities and the markets considered comparable.

#### b) Transient Tourists (existing/base and induced)

In addition to the local gaming market, a segment of the gaming visitation will come from the non-local area, particularly from the of area tourism. These types of visits can be broken down into two major groups: Based tourist demand and induced tourist demand. Both are explained below:

#### Existing or Base Tourists

The existing or base tourist segment reflects traditional tourists to the area that might patronize the gaming operation as a secondary attraction. These tourists are likely drawn to the area due to its scenic beauty, outdoor recreation or resort and theme park options. For the tourist market, data will be drawn regarding hotel demand in the market, with a capture rate applied based on the accessibility of the gaming venue from the area hotels. Data on the state's tourist market and sub markets will be collected from third party organizations and analyzed by region in order to understand historical overnight patron demand, current occupancy rates and Average Daily Rates (ADR). This data will then be used a basis for projecting tourist volume.

The Innovation Group will then apply a unique set of gaming factors to visitor volume in order to forecast incremental gaming revenue associated with this segment. The gaming factors primarily include a capture rate and win per visit. Additionally, analysis will be broken down to reflect (1) capture from domestic/in-state tourists versus out-of-state patrons and (2) assess hotel room night shifts from existing to any new supply within casinos in applicable scenarios, for use in the economic impact analysis.

#### Induced Tourist

Induced tourists are new visitors who are stimulated to come to a market for the primary purpose of visiting a gaming attraction. These patrons are typically generated by new or enhanced gaming products within a given area. Separate from base tourists who frequent the area for primarily for other reasons, such as business or tourist attractions, these players spend a greater amount of time at the gaming facility and tend to have higher rate of play. Induced demand is typically evaluated based on a certain travel time radius such as a 3 to 5-hour flight radius. The analysis is based on comparable markets that have introduced gaming with evaluated impacts on tourism growth (i.e. Nevada, Mississippi, Macau, Singapore, The Caribbean and to a degree in Latin America). This evaluation shall be broken down by market origin of visits or "feeder market" and capture and frequency of play will be based upon factors such as the percentage of income eligible population, average annual household incomes, distance of feeder markets to other intervening gaming site(s), and the quality of theses gaming options.

#### c) Traffic Intercept

With respect to highway intercept and the extent that the gaming facility benefits from this component, however limited, data will be collected from the Florida Department of Transportation regarding annual average daily traffic counts, and an intercept rate will be applied based on experiences for facilities with comparable locations nationwide. This intercept will be exclusive of the local market, and the three sources of visitation will be mutually exclusive and collectively exhaustive.

From this analysis, a base-line model will be established, calibrating the gaming factors to reflect the current visitation, revenue and competitive environment of gaming facilities in Florida. Once this baseline is established The Innovation Group will apply iterations to reflect each commercially relevant combination of outcomes, including sensitivities comprising hi/aggressive versus low/conservative cases, and taking combinations of both gaming product, tax scenarios, internal and out-of-state competitive scenarios and other applicable variations.

The distribution of gaming facilities under each scenario will be constructed based on a combination of logical locations given the current market environment, regulatory consideration including local land-use constraints, and potential government economic development goals. Specific locations will be considered for larger types of facilities, such as locations of additional potential pari-mutuel slot operations, and locations of casino/resort complexes, while more generalized absorption rates and total counts of units for a given area will be offered for ambient uses such as internet sweepstakes cafes, areade amusement centers, or truck stops.

The market assessment will yield a five to ten-year, top line annual revenue estimate for each sub-scenario, and will also include an estimate of potential patronage, win per patron, and win per position per day. From a gaming revenue perspective this will facilitate the assessment of employment and economic impacts statewide and determine viable scenarios that meet potential governmental goals. The model will be constructed so that the contribution of out-of-state patrons can be tracked for each region and competitive scenario.

## 7.B.2 – ADDITIONAL SCENARIOS BEYOND EXCLUSIVE AUTHORIZATION FOR CLASS III FOR SEMINOLES

For each scenario other than exclusive authorization for the Seminole Tribe to off Class III games on Indian lands, as defined in IGRA, the fiscal analysis shall (a) address suitable numbers and locations of gaming facilities so as to maximize new economic activity and avoid cannibalization of existing sectors.

#### 7.B.2.a - SUITABLE NUMBERS & LOCATIONS OF GAMING FACILITIES

New facilities entering a gaming market generally result in a combination of total market growth as well as cannibalization of existing facilities. The extent of cannibalization versus new market growth depends upon the depth of market demand, the quality of the new operations and their branding, and whether the locations bring greater convenience to a portion of the market area previously underserved. The assessment of cannibalization will utilize the gravity model and the output of our model can simultaneously calculate the revenue declination from local market gamers at the various facilities. As such, The Innovation Group can utilize the model to help mitigate cannibalization amongst new and existing properties and determine optimal locations throughout the state for maximizing gaming revenue.

Once qualified commercially viable scenarios have been identified in the above analysis, The Innovation Group will convene the Project Team to extrapolate market analysis outputs to be applied as econometric inputs. Inherent in this process will be the de-emphasis of market outcomes which may only drive top line revenue based on the analysis above, but because of the impact of cannibalization are not economically beneficial ultimately to the state. Conversely, properties that may increase competition within the state but also intercept players currently leaving Florida to go to other more convenient markets, such as Panhandle residents that may currently visit the Mississippi Gulf Coast.

Finally, The Project Team will establish several optimized statewide scenarios to be applied to the econometric modeling that will follow. There, the balance between fiscal impacts resulting from high revenue volumes, such as straight gaming tax inflows, can be measured compared to scenarios that might create more substantial job growth or inbound tourism to the state,

#### 7.B.2.b - TAX REGIMES

For each scenario other than exclusive authorization for the Seminole Tribe to off Class III games on Indian lands, as defined in IGRA, the fiscal analysis shall (a) evaluate each of the three alternative tax regimes: (i) one in which all non-lottery gaming activities are taxed at rates corresponding to current pari-mutuel rates; (ii) one in which all non-lottery gaming activities are taxed at national average rates for the respective sub-sectors; and (iii) one in which non-lottery gaming activities are taxed at a rate that would maximize state revenues.

The Project Team recognizes that the gaming tax structure is one of the most important considerations that the industry needs to address. Typically a balance is needed between receiving generating taxes from gaming operations and the ability to create and maintain a competitive and sustainable industry. Significantly high gaming tax rates can stifle the ability of projects to get financed and ultimately developed. In addition, high gaming tax rates on gaming operations can impact an operator's ability to effectively compete from both a physical product and a marketing perspective. Conversely, tax rates should not be so low they prevent collection of the ample funding needed for regulatory oversight and other associated public costs.

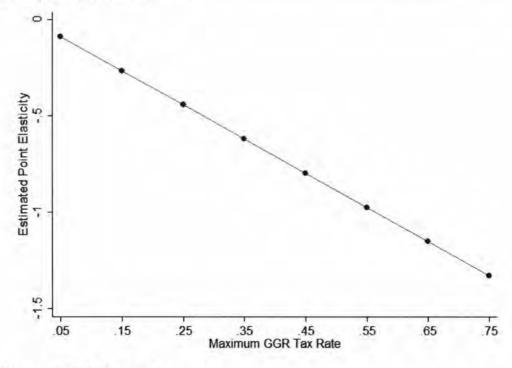
However, in some cases, this can be counteracted through a critical mass of gaming developments depending on potential of market.

To address the impact of taxes comprehensively, within each market sub-scenario run in the preceding analysis, the fiscal analysis will be separated into three different components that each evaluates a different tax structure. The first structure examined will include fiscal outcomes that result from taxing all non-lottery gaming activities at rates corresponding to current pari-mutuel tax rates.

The second structure will include fiscal outcomes from taxing non-lottery gaming at national average rates for the given form of gaming (i.e. subsector). Distinguishing the game can be an important aspect to corresponding fiscal impacts. Some states, such as Nevada, have chosen to apply a single rate to all games (6.75% on slots, tables games, and online poker) while other states, such as Pennsylvania, have chosen to tax table games at a lower rate (16%) than slot machines (34%).

Finally, the third structure will include fiscal outcomes from taxing non-lottery gaming at a rate that would maximize state revenues. This is not a straightforward figure to calculate, as the choice of taxation rate will affect other aspects of the economy. Dr. Philander and Dr. Bernhard have studied this topic extensively and have conducted empirical research to examine the economic impact effects of casino tax levels. As shown in Figure 1, beyond a rate of roughly 55%, casino employment falls at a rate greater than the increase in tax revenue.

Figure 1: Percentage change in casino employment (point elasticity) given the maximum gross gaming revenue tax rate



Source: UNLV Research

The analysis of fiscal impacts from tax structures will also be expanded with a discussion of revenue generating alternatives to gross gaming revenue taxes, such as such as an application fees, background investigation fees, and license fees. Dr. Philander has previously published peer reviewed research on the economic impacts from choosing different types of gaming taxation models.<sup>4</sup>

## 7.B.2.c - LEVERAGING EQUITY & PROFITS OF GAMING AS SOURCES OF PUBLIC FUNDING

For each scenario other than exclusive authorization for the Seminole Tribe to off Class III games on Indian lands, as defined in IGRA, the fiscal analysis shall evaluate (c) economies of leveraging equity and profits as sources for public funding of education, transportation, underwriting risks associated with a catastrophic hurricane event in Florida, and other public funding needs.

For all scenarios resulting from the work on section B.1.a-j, and all relevant combinations of scenarios, The Innovation Group will analyze the fiscal impacts that could be recognized and used specifically toward public programs and risk mitigation funding by the gaming companies/properties. This will be accomplished through a comparative analysis. This analysis will compare markets across the United States and find those markets that are most similar to Florida, when applying the scenarios individually. Utilizing those markets, The Innovation Group will analyze and document the taxes and fees that are accessed to gaming activities and trace them to the programs they are earmarked to fund. Upon documenting these results, The Innovation Group will create a matrix illustrating the fees and rates per competitive market by public fund. Additionally, The Innovation Group will create a recommendation of appropriate ranges of fees and taxes that could be assessed in the market by scenario that would be commensurate with other markets and bolster the public programs for the betterment of the community and state.

#### 7.B.3 – FISCAL IMPACTS & SOURCES OF VARIATION

So the Legislature might best understand not only the fiscal impact estimates but also sources of variation, for each scenario, the analysis shall describe: (a) inputs to the study's fiscal impact models.

#### 7.B.3.a - INPUTS TO STUDY'S FISCAL IMPACT MODEL(S)

Economic Impact Analyses require a multitude of inputs that will vary based on gaming establishment type and location. However, all impacts relate to one-time (construction) and ongoing (gaming operations) these impacts roll into the establishment of fiscal impacts. To establish the fiscal impacts, The Innovation Group will first have to develop a construction budget and on-going pro forma income statements for each scenario and type in order to develop the inputs for the fiscal impacts. The development of the construction budgets and pro forma income statements will be performed as follows:

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<sup>&</sup>lt;sup>4</sup> Philander, K. (2013). Specific or Ad Valorem? A Theory of Casino Taxation. *Tourism Economics*, Online First, DOI: te.2013.0265.

#### Construction

High level construction cost estimates for the physical development of each gaming venue type will be necessary to provide the inputs for an economic impact study. Building plans and the associated costs can vary widely based on, but not limited to, the availability of skilled labor in the area, commodity prices, the quality of the finish, the chosen furniture, fixtures, and equipment, and seismic, geologic, and/or environmental challenges related to the site. The Team will provide a development cost analysis based on our knowledge of similar projects and the current environment in the construction market in the region.

Space program tabulations will be estimated covering all public and back-of-house areas comprising the casino and amenity portion of the development. The Team will then present independent square foot area summaries and a square foot area programs by function for each scenario. Inputs will include the costs of labor and materials, per square foot area cost budgets, and per square foot furniture, fixtures, and equipment budgets. Pre-opening expenses, typical consultant fees, financing costs, and other such soft costs will be projected for the full period for each proposed development in each scenario will be measured. The results will be a series of inputs to be incorporated into the input/output models.

#### Pro forma Income Statement

The preparation of financial pro formas for the proposed development in each sub scenario is important in providing the state with fiscal impact for what the proposed scenarios. Based upon the results of section B.1, the Project Team will assess expenses for the gaming operations (including full scale facilities that include non-gaming amenities), and provide a financial proforma showing operating expenses and the EBITDA (earnings before interest, taxes, depreciation and amortization) for the proposed facilities.

In generating pro formas The Innovation Group will apply detailed internal operating models, and supplemental information based on actual performance results of comparable and typical facilities. In addition to gaming revenues, estimates of other revenues such as F&B and entertainment, and retail sales will be estimated, where applicable.

The Innovation Group will prepare a consolidated five-year financial pro-forma with full profit and loss statements showing EBITDA for the facilities in each scenario with departmental details covering not only revenues, but centralized expense estimates for G&A, marketing, property operations, and related categories.

Once the inputs are developed through the creation of constructions cost budgets and pro forma income statements, The Innovation Group will enter these inputs into the Implan Model (or traditional Input-Output Multiplier System if more applicable) which utilizes economic multipliers to calculate the direct, indirect, and induced effects on the state, county, and city which will account for the ripple effect through the economic landscape in Florida. This will be accomplished across sub-scenarios to understand the level of job creation, monetary value to the economy, and the fiscal impacts to the state of Florida. The fiscal impacts include, but are not limited to the following items:

- 1. Sales tax receipts
- 2. License Fee
- 3. Property Taxes
- 4. Payroll/Income taxes
- 5. Beverage Tax
- 6. Revenue sharing with state and local jurisdictions
- 7. Hotel/Motel Taxes
- 8. Impact fees

#### 7.B.3.b - CALCULATIONS THE MODEL USES TO ESTIMATE FISCAL IMPACTS

So the Legislature might best understand not only the fiscal impact estimates but also sources of variation, for each scenario, the analysis shall describe: (b) the calculations the model uses to estimate fiscal impacts.

The economic impact analysis will address the quantifiable, or tangible, economic impacts of the construction of the gaming facility and the operations. The analysis is based on financial inflows and outflows associated with operations and construction, and will consist of an estimate of dollar circulation in the economy, fiscal benefits, and number of jobs that will be generated by the project.

Multiple impact types will be addressed, including direct tax-based fiscal impacts, and secondary impacts that may represent other related sources of direct revenue resulting from tourist spending or wage taxes where applicable (recognizing that a state income tax per se is not a factor in the state of Florida). Business spending impacts will be estimated along with the incremental earnings that area residents will expect, as a result of increased spending throughout the local community. Further, assessments will be made in the areas of one-time new construction, increased tourism to the area, tax and fiscal benefits and other on-going operational industry impacts. Tax generation will be estimated on the basis of materials trade and ancillary spending. If any distributions are being considered as providing to the public good, these figures will be input into the report to demonstrate the benefits that may accrue.

Direct, indirect, and induced impacts will be addressed. These measurements will all be made based on either direct calculations or the Implan model described above.

## 7.B.3.c - ACCOUNTING FOR CANNIBALIZATION AGAINST OTHER SECTORS OF THE ECONOMY

So the Legislature might best understand not only the fiscal impact estimates but also sources of variation, for each scenario, the analysis shall describe: (c) the calculations the model uses to account for cannibalization against other sectors of the economy, including other potential expansions of gaming.

To accomplish the goals set forth in this section, the Project Team will use two methods to understand and analyze cannibalization for the expansion of gaming and for the other sectors of the economy. To measure the cannibalization within the gaming establishments being suggested and analyzed for each scenario, the team will incorporate a gravity model. The Project Team recognizes that this process was covered in the Market Analysis section of the proposal, and has reiterated the explanation here again.

#### Cannibalization of gaming establishments

The basic formulation is that the interaction between two or more gaming venues is based on distance, attraction factors, and various other characteristics that were described further in section B.1. Through the use of this model, The Innovation Group will have total visits to each facility, total spend per visit, and total revenue. By using this type of model, The Innovation Group can include and exclude various gaming facilities and units and document the affects. These affects are considered the cannibalization with the market between gaming establishment by scenario.

#### Cannibalization of other sectors of the economy

By utilizing an input/output model (such as Implan) with multipliers by subsector derived from governmental resources The Innovation Group can understand the affects that the expansion of gaming has on other sectors of the economy. By isolating the results of section B.1 and section B.3.a by venue, region, area, and scenario The Innovation Group are able to document the effect on the subsectors and analyze the results that are exported from the input/output model. The variances from iterations to iterations of the model run will measure the cannibalization effect.

The resulting deliverable will be a chart/matrix illustrating all scenarios that were run and what the results on direct, indirect, and induced impacts on both one-time (construction) and on-going (operations) impacts as well as fiscal impacts.

#### 7.B.4 - ESTIMATES OF TOTAL SPENDING & NET ECONOMIC IMPACT

## 7.B.4.a - CURRENT VISITORS WHO WOULD HAVE COME TO FLORIDA IN THE ABSENCE OF EXPANDED GAMING

For each scenario, the analysis should include estimates of total spending and net economic impact (recognizing reduced spending at other Florida business because visitor and resident spending has not flowed to gaming activities) for gaming as well as the change in demand associated with each of several sources including (a) current visitors who would have come to Florida in the absence of expanded gaming or extend the length of their visit if additional casino gaming were available.

Impacts on length of stay and total and gaming versus non-gaming spending in the economy shall be calculated within the Market Analysis described earlier in this proposal, then reflected in the economic impact modeling as such spending flows through the economy in relevant sectors. Specifically, incremental tourist spending, regardless of where it is spent, would be attributed to the various forms of expanded gaming, while cannibalized spending, such as expenses that shift for example from an existing hotel room to a new hotel room potentially at a casino resort, shall not be accrued as a benefit derived from gaming activity.

## 7.B.4.b - FLORIDIANS WHO NOW GAMBLE OUT OF STATE OR AT NATIVE AMERICAN CASINOS

For each scenario, the analysis should include estimates of total spending and net economic impact (recognizing reduced spending at other Florida business because visitor and resident spending has not flowed to gaming activities) for gaming as well as the change in demand associated with each of several sources including (b) Floridians who now gamble out of state or in Native American casinos who would instead opt to gamble in Florida if additional local gaming activities were available.

Based on available data (and estimation techniques to fill in any missing information) the travel patterns of Floridians to other gaming jurisdictions (e.g. the Mississippi Gulf Coast, the Bahamas, Las Vegas, or at Native American Casinos) will be determined. While many of these Floridians will still want to travel to these other locations for the sake of vacationing away from home, others will decide to repatriate the gambling activities to Florida should the opportunity to do so exist.

## 7.B.4.c - FLORIDIANS WHO DO NOT NOW GAMBLE BUT MAY PARTICIPATE WITH GAMING ACTIVITY EXPANSION

For each scenario, the analysis should include estimates of total spending and net economic impact (recognizing reduced spending at other Florida business because visitor and resident spending has not flowed to gaming activities) for gaming as well as the change in demand associated with each of several sources including (c) Floridians who do not now gamble but would participate if additional gaming activities were easily available.

The existence of gaming in Florida may increase the participation rate of Floridians who currently do not gamble; or the local existence of gaming facilities may increase local residents' participation in gambling; both possibilities are plausible. To estimate this effect the Market Analysis described earlier in this proposal specifically assesses incremental local revenue by the potential sub-scenarios increasing gaming supply where latent demand may currently exist. Additionally, to triangulate such estimates, participation rate from other U.S. markets will be evaluated to determine whether the proclivity to gamble was impacted by the local existence of gaming facilities.

#### 7.B.4.d - VISITORS WHO WOULD PLAN A VISIT TO FLORIDA DUE TO GAMING

For each scenario, the analysis should include estimates of total spending and net economic impact (recognizing reduced spending at other Florida business because visitor and resident spending has not flowed to gaming activities) for gaming as well as the change in demand associated with each of several sources including (d) visitors who would plan a visit to Florida rather than an alternative destination due to the availability of gaming here.

The treatment of induced tourists in the Market Analysis described earlier in this proposal details the approach that the Project Team will take to estimate new tourism spawned exclusively by expanded gaming. This metric in essence represents the total number of visitors planning new travel to Florida which would not have occurred (i.e. other destinations would be preferred) without gaming expansion. The impacts of the new dollars entering the economy from this segment are among the highest value realized in the econometric modeling process.

## 7.B.4.e - VISITORS WHO WOULD NOT CHOOSE FLORIDA BECAUSE OF PRESENCE OF GAMING

For each scenario, the analysis should include estimates of total spending and net economic impact (recognizing reduced spending at other Florida business because visitor and resident spending has not flowed to gaming activities) for gaming as well as the change in demand associated with each of several sources including (e) visitors who would not choose to visit Florida due to the presence of gaming activities.

While complementarities could exist between Florida's current tourism industry and the gaming industry, which could amplify the beneficial economic impacts for Florida by enhancing Florida's tourism brand, a further developed gaming industry could reduce the amount of Florida's current tourism industry by discouraging some current tourists from returning to Florida by diminishing Florida's tourism brand. Under this possibility, the economic benefits

from a developed gaming industry would be reduced. This section will examine the complementary/substitution issue to determine how the projected economic impacts estimated in A.2.c are impacted.

## 7.B.5 – SOCIAL COSTS OF GAMING: PROBLEM GAMING, PATHOLOGICAL GAMING & CRIME

For each scenario, the analysis shall provide an assessment of the likely social costs of expanded gaming activities, including problem and pathological gaming-related behaviors and changes in crime rates. The assessment shall compare and contrast credible existing studies of social costs of gaming and provide social cost scenarios to match the preceding economic and fiscal analyses.

For each scenario, The Project Team will provide an assessment of the likely social costs of expanded gaming activities, including problem gambling related costs and changes in crime rates/volume. This assessment will be based on existing studies of social costs of gaming that are identified as being credible, and will provide social cost scenarios to match the preceding economic and fiscal analyses.

Separating credible research/estimates from other figures (and providing appropriate context) is crucial to providing valuable estimates of social costs. For example, claims using one study that estimates gambling creates annual costs of \$219 per tax payer are often made out of context as this study uses inappropriate prior research to derive their social costs of problem gamblers estimates. Those research studies date back as far as 1981, prior to the dawn of the "resort casino" era, and often focus on small jurisdictions (e.g., South Dakota), and hence the analysis is not easily generalized to most new casino markets.

The UNLV Team, led by gambling sociologist Dr. Bernhard, are uniquely skilled in interpreting and applying gambling related social cost estimates.

#### 7.B.6 – ITERATIVE ANALYSIS

For each scenario, the analysis shall evaluate whether and how estimates would change if implemented in combination with other scenarios.

Through the process of developing sub-scenarios as detailed in the Market Analysis, and iteration among scenarios to establish commercially viable cases, each potential relevant combination of cases will be exhausted. Through the documentation of this process, The Project Team will isolate and analyze specifically how the market changed by scenario and combinations of sub-scenarios. The resulting full project report will clearly define what scenarios were utilized and what effect they had on public and private sector activity in the local and state economy.

<sup>&</sup>lt;sup>5</sup> This assertion is taken from Grinols, E. L., & Mustard, D. B. (2001). Business profitability versus social profitability: Evaluating industries with externalities, the case of casinos. *Managerial and Decision Economics*, 22(1-3), 143-162.

## 6.2.1.3.b Timeline

### Part I.A (1-2)

Florida St	atewide Timeline by Task					April			May	,		Jun	е
	, , , , , , , , , , , , , , , , , , , ,												
			UNLV = U ALME = A RMC = RI	e Innovation Group Iniversity of Nevada Las Vegas Irduin, Laffer & Moore MC Legal lical Infrastructure Mapping	Week 1	Week 2 Week 3	Week 4	Week 5	Week 7	Week 8	Week 10	Week 11	Week 12 Week 13
PARTIA	Due July 1, 2013												
Task A.1.a	Description of Services per ITN Gaming popularity, profitability, regulatory, cost mitigation	General Category Regulatory	<b>Lead</b> TIG	Support 1 Support 2 UNLV									
A.1.b.i-i-ii	Regulatory schemes, authorizing and revocation mechanisms	Regulatory	RMC								***		
A.1.b.iii	Taxation schemes	Regulatory	RMC	UNLV	317								
A.1.c	Trends and best practices in governance and regulation including problem gambling	Regulatory	RMC	UNLV									
A.1.d	Gaming as public funding source including comparison of states, reliability and direct and indirect costs	Regulatory	UNLV	TIG									
A.1.e.i	Social, criminal and personal gambling impacts	Regulatory/Economic Impact	UNLV	TIG				Ty and					
A.1.e.ii	Short and long-term fiscal gambling impacts	Regulatory/Economic Impact	TIG	UNLV									
A.2.a	Economic assessment of Florida's existing gaming industry featuring gaming sub-sectors, size and economic importance	Economic Impact	ALME	TIG									
A.2.b	Economic assessment of Florida's existing gaming industry featuring direct, indirect and induced components by sub-sector	Economic Impact	ALME	TIG									
A.2.c	Economic assessment of Florida's existing gaming industry featuring assessment of changes of impacts through present day, historically and projections for future	Economic Impact	ALME	TIG									

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## Part I.B (1)

Florida Sta	tewide Timeline by Task						A	pril				May				Ju	ıne				July	
			UNLV = U Vegas ALME = A RMC = R	e Innovation G University of No Arduin, Laffer & RMC Legal ritical Infrastruct	evada Las L Moore	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17
PARTIB Task		General Category	Lead TIG	Support ALME	1 Support 2																	
B.1.a	Renewal of Seminole Tribe's exhibitive authorization for banked card games	Garning Market	110	ALME	RIMC																	
B.1.b	Granting Seminole Tribe exclusive authorization for table games	Gaming Market	TIG	ALME	RMC																	
B.1.c	Regulating, prohibiting, restricting or laxing casino-style gaming at Internet sweepstakes cafes, arcade amusement centers or truck stops	Gaming Market	TIG	ALME	RMC																	
B.1.d	Modifying or repealing live racing requirements for pari-mutuel facilities including impact on purses/awards for 5 property types	Gaming Market	TIG	ALME	RMC																	
B.1.e	Changing tax rates for Class III games at pari-mutuel facilities	Gaming Market	TIG	ALME	RMC							E -										
B.1,f	Adjusting restrictions on the number and operation of slot machines at Browad and Miami-Dad parti-mutuel facilities	Gaming Market	TIG	ALME	RMC																	
B.1.g	Authorizing parti-mutuel facilities in counties other than Miami-Dad and Broward to offer stots	Gaming Market	TIG	ALME	RMC							- 54										
B.1.h	Authorizing parti-mutuel facilities to conduct table games or other Class III games	Gaming Market	TIG	ALME	RMC							FIL										
B.1.i	Authorizing limited number of casino/resort complexes in Miami-Dade and/or Broward counties	Gaming Market	TIG	ALME	RMC							3										
B.1.j	Authorizing a limited number of casino/reort complexes around the state	Gaming Market	TIG	ALME	RMC																	

### Part I.B.(2-6)

Florida	Statewide Timeline by Task							May				J	ine				July				Au	gust			Septe	mber	
			Vegas ALME = RMC = R	ie Innovation G University of N Arduin, Laffer & RMC Legal rifical Infrastrud	evada Las L Moore	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20	Week 21	Week 22	Week 23	Week 24	Week 25	Week 26
B.2.a	Suitable numbers and locations of garning facilities to maximize net new economic activity and avoid cannibalization	Garring Market	TIG	UNLV													ļij= <sup>™</sup> .	3 E									
B.2.b		Garning Market	UNLV	TIG																							
B.2.c	Economies of leveraging equity and profits as sources of public funding for various sources	Gaming Market	TIG	UNLV	ALME, RMC												1										
B.3.a	Inputs to the study's fiscal impact models	Economic Impai	d TIG	ALME	UNLV														1.7								
B.3.b	Calculations the model uses to estimate fiscal impacts	Economic Impai	d TIG	ALME	UNLV																						577
B.3.c	Calculations the model uses to account for cannibalization against other sectors of the economy, including other potential expansions of gaming	Economic Impai	d TIG	ALME	UNLV																						
B.4.a	Estimates of total spending and net economic impact for gaming as well as change in demand for current visitors who will expand stay or spend due to gaming	Economic Impai	d ALME	TIG	UNLV																						
B.4.b	Estmates of total spending and net economic impact for gaming as well as change in demand for Floridians who now gamble out of state or at Native American properties		d ALME	TIG	UNLV																						
B.4.c	Estimates of total spending and net economic impact for those who do not gamble but would if more activities were made available	Economic Impa	d ALME	TIG	UNLV																						
B.4.d	Estimates of bial spending and net economic impact for gaming as well as change in demand for visitors who plan to visit Florida due to gaming alternatives	Economic Impar	d ALME	TIG	UNLV																						
B.4.e	Estimates of total spending and net economic impact for gaming as well as change in demand for visitors who may not choose Florida because of expanded gaming	Economic Impar	d ALME	TIG	UNLV																						
B.5	Likely social costs including problem and pathological gambling	Regulatory	UNLV		1								1/3/5														
B.6	Whether and how estimates would change if implemented in combination with other scenarios	Summary	TIG																								

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## 6.2.1.3.c Project Team

#### **Organization Chart**



#### Relevant Background of Core Project Team

As previously mentioned, the Project Team has been strategically assembled to offer the state the best possible combination of resources to achieve the required research goals, cohesively and efficiently, under the leadership of The Innovation Group. The backgrounds shown below provide a comprehensive summary of the individuals who will be working on the team. We have broken out the team members by company.

#### THE INNOVATION GROUP (TIG)

#### Michael Soll – President, TIG Project Role: Principal-in-Charge

Michael Soll's range of skills and experience makes him especially valuable to The Innovation Group team. As an analyst and development specialist he can identify and evaluate the pertinent financial and site data on which clients can base sound business decisions. As an asset manager, he has experience in capital planning, refinancing, negotiating and evaluating the viability of ventures. As a brand specialist, he understands the power and value of customer relationships and third party associations. In combination, this set of talents and abilities enables Mr. Soll to provide a high level of advisory oversight.

Mr. Soll actually began his career with The Innovation Group and has come full circle, bringing back ten years' hands-on experience in the gaming, lodging and financial industries. In his first career position as The Innovation Group's Vice President, Gaming & Hospitality Research, Mr. Soll conducted gaming and lodging demand, financial feasibility, and economic impact studies, and prepared development proposals for hospitality operators, investment firms and public sector clients.

Before rejoining The Innovation Group, Mr. Soll was most recently Vice President Casinos for Hard Rock Café International, Inc. In this capacity, he led the worldwide development and asset management activities for Hard Rock Casinos and their related hotel, condo and resort amenities. He was responsible for the identification of potential US and international opportunities and their execution. He also oversaw the structuring and negotiating of joint venture, management and license agreements, econometric modeling, feasibility analysis and lobby efforts in emerging jurisdictions. In this capacity, Mr. Soll directed expansion projects for Hard Rock in the US, Asia, Europe, South America and the Caribbean.

Prior to his position at Hard Rock, Mr. Soll was Vice President Planning & Development for Caesars Entertainment in Las Vegas. There, he managed Caesars' development efforts in existing and emerging US, international and Tribal gaming jurisdictions. His primary responsibilities included identifying partners, jurisdictions and sites suitable for deployment of the Caesars brand, and subsequent analysis, structuring and negotiations.

At Starwood Hotels & Resorts, Mr. Soll was Director Asset Management, overseeing Starwood managed and joint venture hotel portfolios under the Sheraton, Westin, W and external Starwood brands. Here he was responsible for capital planning, forecasting, contract maintenance, owner dispute resolution and refinancing initiatives.

Prior to that position, Mr. Soll served as Vice President, Leisure Equity Research for Bear Stearns & Co., New York. There, Mr. Soll researched mid and large-cap gaming and lodging companies for institutional investors and the internal equity sales team, developed company models, valuations, earnings forecasts and market research.

A University of Wisconsin graduate, Mr. Soll received his M.S. in Urban and Regional Planning from The College of Urban and Public Affairs in New Orleans.

#### S. Paul Girvan - Managing Director, TIG

#### Project Role: Senior Executive of Research & Analysis

As a British-trained demographer, geographer and economist, Paul Girvan's depth of study in these interconnected disciplines enables him to recognize key trends and patterns that are often overlooked by traditional research alone. Since joining The Innovation Group in 1992, Mr. Girvan has conducted an extraordinary array of gaming, leisure and hospitality industry research projects, often pioneering new techniques and combining existing research tools to provide more insightful, reliable analysis. His wide range of experience and visionary approach ensures Innovation Group clients of a well-conceived and comprehensively-managed project from the outset. The insight and accuracy of Mr. Girvan's reports have assisted clients in obtaining government approvals, management contracts, financing for facilities and the acquisition of strategic properties.

Mr. Girvan's studies have covered every major U.S. gaming and hospitality market and several international markets as well. For the Government of Panama, he directed the analysis of state-run hotel-based casinos that ultimately led to their privatization and upgrading. In El Salvador, he conducted an in-depth analysis of national lottery operations, which lead directly to our client's obtaining a nationwide operating contract.

Mr. Girvan is in the unique and highly trusted position, of being entrusted with player database summaries from a number of casino properties across the U.S. and Canada. Using GIS software, these have been mapped and competitive advantages identified. In this he has gained a unique perspective into the geographic distribution of casino gamers that few, if any, in the industry can match.

In one of his most in-depth and high-profile roles, Mr. Girvan served as a consultant to the Philadelphia Gaming Advisory Task Force, during which time he completed a very comprehensive study of the proposed slot operations in the city which included analyses for 11 sites, developing market assessments and revenue projections for 14 scenarios, developing 28 pro formas, estimating local and overnight modal splits, estimating the fiscal impacts of problem gambling and impacts of crime and providing secondary research on trends in gaming. As primary consultant, he also oversaw the work of other consultants involved in the design and analysis.

Functioning as the lead Canadian gaming specialist for The Innovation Group throughout the past decade, Mr. Girvan's longest running client is OLG, including a province-wide strategic planning process designed to determine the optimal future development of provincial wide

gaming properties, numerous project-specific assessments, and recent research that led to the privatization effort throughout Ontario.

Mr. Girvan's depth of experience in research techniques extends to his development of tailored customer surveys and intricate statistical analyses. His interpretations often lead directly to operational changes to improve customer service, to new promotional programs, to modification in physical facilities and ultimately to increased market share and revenues. He has also innovated a number of analytical techniques using GIS software, developing a proprietary technique utilizing player-tracking data to map market penetration by zip code. By segmenting the player database and assigning lifestyle cluster codes to the segments, Mr. Girvan has been able to target not only geographic areas, but also to target customers likely to be similar to those in a specific segment of the existing database. Building on this approach, he has been able to aid clients in the development of customized marketing and media programs.

With his breadth of training and experience, Mr. Girvan is a published author and sought-after speaker at gaming industry conferences and events. He has recently contributed articles and white papers on such relevant subjects as the Canadian gaming market, the impact of smoking bans on gaming jurisdictions, iGaming, and the value and trends of amenities at destination resorts.

Mr. Girvan has a Master's in Urban and Regional Planning with a specialization in Economics. He also holds an associate's degree in Economics and a Bachelor of Science with Honors in Geography and Geology.

#### Cameron Steinagel - Vice President, TIG

#### Project Role: Research & Analysis, Florida Specialist

Cameron Steinagel's past experience makes him a valuable asset and resource for The Innovation Group and their clients. Mr. Steinagel came to The Innovation Group with over 10 years of experience in the gaming industry, where he held many positions and responsibilities.

Mr. Steinagel began his career as an Internal Auditor with MGM Resorts International in Las Vegas where he was able to gain knowledge and experience in gaming policies and procedures. Shortly thereafter, he graduated to a newly formed department tasked with initiating, implementing, and managing strategic initiatives under the Chief Financial Officer. These strategic initiatives included, but were not limited to; the integration of the Mandalay Bay acquisition, the restructuring of the company's aviation department, and the research and due diligence efforts for the potential of adding wireless gaming devices to the casino offerings and their effect on in-house gaming.

Following his experience in Las Vegas, Mr. Steinagel diverged from the gaming industry for a year and worked for Payless Shoesource where he maintained the corporate long-range financial plan and analyzed departmental profitability and cost margins. Additionally, he played an integral role in the integration efforts of the newly acquired Stride Rite brand and pushed the company's balanced scorecard efforts to the merchandising, logistics, and corporate buying teams.

Subsequent to his experience at MGM Resorts International and Payless Shoesource, Mr. Steinagel was part of the development team at Boyd Gaming tasked with many important duties for the \$4.8B mixed-use Echelon project on the Las Vegas Strip. His duties included feasibility studies to determine size, scope, and viability of project components and earnings potential, project management over the site's "featured" restaurants inclusive of hiring and managing consultants and identifying partners, and the initial planning and early development of the retail promenade.

As the Echelon project wound down due to poor economic factors, Mr. Steinagel worked at the Boyd corporate office where he performed due diligence efforts for all potential mergers, acquisitions, and expansions along with performing analysis for other strategic initiatives.

Mr. Steinagel graduated from Utah Valley University with a B.S. in Accounting.

#### Renese Rhoden - Manager of Finance & Leisure Development, TIG Project Role: Research & Analysis, Florida Specialist

Renese Rhoden joined The Innovation Group as a Manager of Finance and Leisure Development and brings a wide array of financial experience in gaming operations, hotels and investment banking. Ms. Rhoden works with clients to conduct feasibility analysis, market assessments, operation analysis and financial projects for proposed and existing gaming and leisure enterprises.

During her time at The Innovation Group, Ms. Rhoden has worked on a number of multi-faceted developments that encompass gaming, hotels, entertainment, convention and meetings and/or other leisure-driven amenities. Her projects have spanned numerous locales throughout the U.S. and include financial forecasting, feasibility studies, market assessments and ROI analysis. Ms. Rhoden has worked on international projects in Asia, Europe and has been especially active in Latin America and the Caribbean. Her skills and experience have been utilized by a diverse array of clients and include companies such as Las Vegas Sands, Hard Rock Café International, Penn National and CODERE as well as government organizations from Puerto Rico, Costa Rica and Jamaica.

Prior to joining The Innovation Group, Ms. Rhoden has had extensive experience in the state of Florida having worked for multiple companies throughout the years in the gaming and leisure industries. Her roles included financial analyst at the gaming administrative offices for the Seminole Tribe of Florida, a real estate analyst at the boutique investment banking firm in Miami, Florida and hotel management at the Four Seasons in Palm Beach, Florida.

Ms. Rhoden holds a Bachelors degree with a concentration in Finance from Cornell University's School of Hotel Administration as well as a MBA from Nova Southeastern University. She returned to Nova in 2008 to obtain a Graduate Certificate in Real Estate Development.

#### Max Remer - Senior Analyst, TIG

#### Project Role: Research & Analysis, Florida Specialist

Since joining The Innovation Group, Max Remer has conducted feasibility analysis, financial forecasting, and market research on a wide variety of projects, including casinos, convention centers, entertainment venues, hotels, cultural attractions and retail and food and beverage offerings. His work has also included studying the impacts of gaming on lotteries for the state of Massachusetts and examining the market saturation of gaming in states such as Florida and Maryland. His experience with project scope has ranged from small locally focused gaming establishments to large "game changing" destination gaming resorts. While Mr. Remer has conducted extensive analysis in well developed markets throughout the US, he has recently been focused on newly developing markets, both domestically and internationally.

Outside of his work at The Innovation Group, Mr. Remer is an attentive member of his local community where he sits on the Economic Development Advisory Board for the City of Winter Park, Florida. In addition, he is a founding member of the Emerging Leaders in Gaming young professionals group.

Mr. Remer attended Rollins College where he graduated Cum Laude with a Bachelor's Degree in Political Science and also received his MBA with concentrations in Finance and Management.

#### David Rittvo - Director of Business Development, TIG Project Role: Research & Analysis, Florida Specialist

David Rittvo is Director of Business Development and Director of Food & Beverage at The Innovation Group of Companies. He joined The Innovation Group in 2009 to help formalize a specialty advisory discipline within the organization that provides F&B-specific consulting, marketing, development, financial, operational and management advisory services to the firm's gaming, entertainment and hospitality clients.

David received his undergraduate degree in Hotel, Restaurant and Tourism Management from the University of Denver, as well as an MBA with a concentration in Hospitality Finance and Investments.

#### Steven M. Rittvo - Chairman/CEO, TIG

#### Project Role: Executive Advisor, Florida & Government Specialist

Steve Rittvo is a veteran of over 2000 planning studies – and the individual recently recognized among the *Top 10 Most Influential People in the Gaming Industry* - uses the sophisticated resources of The Innovation Group of Companies to perform a variety of market studies and financial analyses to form conclusions so accurate you can literally take them to the bank.

Mr. Rittvo and his partners founded The Innovation Group in the 1990s and have built the firm into the nation's premier provider of consulting services for the gaming, leisure and hospitality industries. As Chairman, Mr. Rittvo is principal-in-charge for many of the firm's most challenging assignments, providing overall policy direction, technical oversight and manpower allocations for the company.

Over the past few years, Mr. Rittvo and partners have formed four more affiliates which can take the recommendations and analysis of The Innovation Group full circle. The five affiliates are united under the banner of The Innovation Group of Companies, and include Innovation Capital, LLC, an investment bank with a practice focused on the gaming industry; Innovation Marketing, a full service marketing, advertising and public relations firm; Innovation Project Development, an owner's representation, multi-disciplined project management services company capable of providing consulting advice or total development oversight; and Innovation Management Services, a turn-key operational and management advisor specializing in short-term, distress situations and turnaround implementation. Innovation Food & Beverage, Innovation Sports & Entertainment and Innovation Interactive are also under his oversight.

Mr. Rittvo's expertise in gaming-related projects and his extensive knowledge of the industry has made him a valued consultant to gaming companies throughout the world. He has completed a wide range of management and planning projects during his thirty-two years as a professional, but his primary focus during the last thirteen years has been on gaming-related projects throughout the United States, Central America, Europe, and the Middle East, with a concentration on financial analysis.

Government bodies around the world have asked for his analysis, as have Wall Street and the investment banking community. Mr. Rittvo has served as a consultant to JP Morgan Bear Stearns; Salomon Smith Barney; Oppenheimer; Jefferies and Company; Wasserstein Perella and Company; First Boston; Miller Schroder; Dain Bosworth; Deutsche Bank; Bank of America/Merrill Lynch; Sunitomo, Morgan Stanley, and Wells Fargo to name a few.

Many of Mr. Rittvo's gaming clients have also come from the public sector. He has completed major consulting projects for the states of Illinois, New Hampshire and Pennsylvania; City of Bridgeport; Connecticut; Port of New Orleans; Republic of Panama; Governments of Israel and Bermuda, and the Province of Ontario to name just a few.

Mr. Rittvo's experience and depth of understanding of the industry have made him a sought-after resource for his opinions and insights. He's been a featured speaker at over 30 gaming conferences. He co-authored a book on the gaming industry published by University of Nevada, Las Vegas. In addition, he is often called in as a qualified expert witness in gaming project feasibility and financial analysis. The U. S. Department of the Interior recently engaged Mr. Rittvo as an expert witness to testify before a NAFTA tribunal, an adjunct of the World Court, in an international dispute involving a financial valuation of a casino operation. He also recently testified regarding an un-related casino valuation situation at the World Court at The Hague, as well as at the Pennsylvania State Legislature regarding critical table games issues.

As a current member of the Casino Advisory Committee of the Casino Resort Advisory Council of Tulane University, Mr. Rittvo is involved in cultivating educational programs to support the region's growing gaming markets. He is also on the Advisory Committee of the School of Hotel, Restaurant and Tourism Management at the University of Denver.

Mr. Rittvo holds a bachelor's degree in Systems Engineering and a master's in Transportation Planning and Engineering from the Polytechnic Institute of Brooklyn. He has completed coursework toward his doctoral degree at the University of New Orleans, College of Urban and Public Affairs.

#### Stephen J. Szapor, Jr. - Managing Partner, TIG

Project Role: Executive Advisor, Florida & Government Specialist

Stephen Szapor, Jr. has a solid track record helping casinos and hotels operate at peak efficiency. When he joined The Innovation Group in 2001, Mr. Szapor already had over sixteen years of operations experience in the gaming industry, having steered a number of complex restructurings and turnarounds. As a senior partner for The Innovation Group, Mr. Szapor works with a variety of clients on high-level strategic and financial planning, primary market research, operational and marketing consulting, and feasibility and market analysis. In addition, he heads up The Innovation Group's practice that supplies due diligence services to clients looking at acquisitions of new businesses or properties.

Prior to joining The Innovation Group, Mr. Szapor was President, CEO and a member of the Board of Directors of publicly traded Colorado Gaming & Entertainment Company and its predecessor company, Hemmetter Enterprises, Inc. In these positions, Mr. Szapor took the company through a complex reorganization that led to emergence from bankruptcy as a public company in 1996, reaching record revenues and profits. He was instrumental in facilitating the sale of the company to the Ladbroke Group, PLC in 1998.

As Chief Operating Officer/Chief Financial Officer and a member of the Board of Directors of the publicly-held Sahara Gaming Corporation, Mr. Szapor had responsibility for six casinos and more than 3,000 employees. During this time, he raised over \$300 million in new debt and equity capital for the company, opening several new riverboat operations and completing a major renovation of the company's Santa Fe Hotel & Casino.

At Hollywood Casino Corporation, he supervised the departments of direct marketing, advertising, market research and public relations for the company's Sands Hotel & Casino in Atlantic City, a facility generating over \$250 million in annual revenues. In addition, as Vice President of Strategic Planning, he played an integral role in the development and pre-opening plans for the company's Aurora, Illinois riverboats.

Mr. Szapor began his career with Arthur Andersen & Co. where he completed numerous auditing and consulting engagements for the firm's gaming and banking clients. Prior to this, he worked for Merrill Lynch & Co. as a Senior Investment Analyst.

Mr. Szapor holds a Bachelor of Science degree from Villanova University and has completed graduate studies at New York University. He is a Certified Public Accountant and has received a key Gaming License/Finding of Suitability from the states of New Jersey, Nevada, Mississippi, and Colorado. He is the recent past Chairman of the Board-Colorado Tourism Office, and has taught Resort and Tourism Marketing at the University of Denver's School of Hotel Restaurant & Tourism Management.

## UNIVERSITY OF NEVADA, LAS VEGAS INTERNATIONAL GAMING INSTITUTE (UNLV)

#### Bo Bernhard, Ph.D. - Executive Director, UNLV

Project Role: Executive Industry Advisor, Gaming Industry Academic, Responsible Gaming Expert

Dr. Bo Bernhard is the Executive Director of the UNLV International Gaming Institute and Executive Editor of the peer-reviewed *UNLV Gaming Research and Review Journal*. He has presented his research work on gambling and society on six continents, and has published in some of the most prestigious journals in both the business sciences (including *Cornell Quarterly*) and the social sciences (including *American Behavioral Scientist*).

An honors graduate of Harvard University, Dr. Bernhard has directed or served as a principal investigator on over \$2 million in research grants examining the impacts of the global gaming industry. While at UNLV, Dr. Bernhard has won university-wide teaching awards as well as the Barrick Scholar Award, given annually to the outstanding young research professors on campus.

#### Khalil Philander - Economist/Lead Researcher, UNLV

Project Role: Executive Industry Advisor, Gaming Industry Economist, Responsible Gaming Expert

Dr. Kahlil Philander is a gaming economist and researcher at the UNLV International Gaming Institute (IGI), who has previously been involved with economic impact and econometric studies for clients in the U.S., Canada, Puerto Rico, Panama, Switzerland, Australia, and New Zealand. His research on the economics of gaming has been accepted into journals such as *Tourism Economics*, *Gaming Law Review and Economics*, and the *UNLV Gaming Research and Review Journal*.

In addition to his research through the UNLV IGI, Dr. Philander is the Senior Policy Researcher at the Responsible Gambling Council Center for Best Practices. He received his Doctoral degree in Hospitality Administration from the University of Nevada, Las Vegas, where his research focused on the on the economic impacts of casino taxation, and he holds a Master of Arts degree in Economics from the University of Toronto.

#### ARDUIN, LAFFER & MOORE ECONOMETRICS (ALME)

#### Donna Arduin - President, ALME

#### Project Role: Executive Florida Economist & Government Specialist

Ms. Arduin is President of ALME Inc. She served as California Governor Arnold Schwarzenegger's Director of Finance from November 2003 until October 2004, where she was the Governor's chief fiscal advisor and was a member of over 70 boards and authorities. Prior to her appointment as Director, Schwarzenegger asked Arduin to undertake an outside, independent audit of California government and state finances.

Prior to working for Governor Schwarzenegger, Arduin served governors from three additional states, including Florida, New York, and Michigan. Donna was Governor Jeb Bush's Director of the Florida Office of Policy and Budget for five years, where she managed the formulation of the

governor's policy and fiscal recommendations, created the nation's first interactive "e-budget," and implemented performance-based budgeting and long-range planning. Additionally, Donna served Governor George Pataki throughout his first term as First Deputy Budget Director and led his successful efforts to reduce and simplify property taxes in New York and reduce the size of state government. Donna also served Governor John Engler for three years during his first term, as Chief Deputy Director of the Michigan Department of Management and Budget, as well as the executive director of his reinventing government commission and his appointee to the Michigan Municipal Bond Board of Trustees.

Arduin offers extensive experience in bringing government spending under control through long-term policy planning and fiscally conservative budgeting. Her Governors have consistently received high marks on the Cato Institute's fiscal report cards during her tenure with their administrations. Ms. Arduin also sat on Governor Bush's Council of Economic Advisors and Property Tax Reform Committee, and recently directed Florida Governor Scott's budget transition team. She is a member of Governor Scott's Economic Advisory Council, is a Senior Fellow at the Texas Public Policy Foundation and the Illinois Policy Institute. Arduin is on the Executive Committee and Board of Trustees for Our Kids of Miami-Dade/Monroe, Inc, which is the community-based organization that coordinates child protection programs for the Miami area.

A graduate of Duke University, Arduin graduated magna cum laude with honors in economics and public policy. She worked as an analyst in New York and Tokyo in the private financial markets for Morgan Stanley and Long-Term Credit Bank of Japan.

#### Wayne Winegarden, Ph.D. – Chief Economist, ALME Project Role: Executive Florida Economist & Government Specialist

Dr. Winegarden manages Arduin, Laffer & Moore Econometric Inc.'s Market Strategy and Analyses division and serves as the Chief Economist. Based on ALME's proprietary models and analyses, the Market Strategy and Analyses division provides strategic advice to public sector clients that have included Governor Rick Scott of Florida, California Gubernatorial Candidate Meg Whitman, and policy groups such as the Texas Public Policy Foundation. These analyses typically relate the impact from national or state economic policies on economic and business performance and, based on these assessments, provide economic policy recommendations.

Additionally, the team led by Dr. Winegarden provides clients with quantitative market research that is designed to help clients overcome current or future market obstacles or leverage potential market opportunities for large public corporations – such as Wal-Mart and American Express – as well as smaller private entities.

Prior to his current position, Dr. Winegarden worked as an economist for Philip Morris International in Hong Kong where he analyzed the East- and Southeast-Asian economies, assessed the impact from the macroeconomic environment on the company's operations, and integrated these insights into the company's strategic planning process. Additionally, Dr. Winegarden examined the impact of tax and regulatory policies on the company's operations and supported its government affairs objectives for the domestic U.S. firm in New York City.

Dr. Winegarden also has experience analyzing federal and state budget, regulatory and financial sectors for policy and trade associations in Washington D.C. Dr. Winegarden has testified before the U.S. Senate Environment and Public Works Committee; and has served as economics faculty at Marymount University and a columnist for Townhall.com. Dr. Winegarden has been interviewed and quoted in such media as Bloomberg Radio and CNN, and is asked to present his analyses and insights at policy conferences and meetings. He is currently a Scholar for the Pacific Research Institute and a columnist for Forbes.com.

Dr. Winegarden received his B.A., M.A. and Ph.D. in Economics from George Mason University.

#### REGULATORY MANAGEMENT COUNSELORS, P.C. (RMC)

#### David Waddell - Attorney / President, RMC Project Role: Regulatory & Florida Specialist

David Waddell, Esq., Regulatory Management Counselors, PC is an attorney and president of Regulatory Management Counselors, P.C. He has 28 years of experience helping clients resolve business issues in heavily regulated industries. His areas of practice include casino gaming law, Native American tribal law, regulatory/administrative law, business, tax and municipal law. He has extensive experience representing casino operators, government agencies, suppliers, and financial institutions with their regulatory planning and issue solving. Mr. Waddell takes pride in forming partnerships with his clients to become sensitive to their needs, goals and future plans in order to help them succeed.

Mr. Waddell is a co-author and creator of *The Michigan Gaming Law Legal Resource Book*, and chief editor of *The Michigan Gaming Newsletter*. From 1999-2008, he wrote extensively for *The Detroit News* in his Michigan Gaming News column. He also sits on the editorial boards for the Gaming Law Review and *Global Gaming Business* magazine, is a member of the International Masters of Gaming Law, and has been listed in Best Lawyers in America for gaming.

## Robert Russell – Government & Business Consultant, RMC Project Role: Regulatory & Florida Specialist

Robert Russell, Gaming Analyst, Regulatory Management Counselors, PC is a governmental and business consultant whose practice focuses on the casino gaming industry. He has over 15 years of experience assisting in the growth and development of the casino industry. In the late 1990's, Robert formed and oversaw the operation of the Detroit/Windsor Casino Management Association. Since the foundation of the Global Gaming Expo, Robert has served as an Advisory Board Member, where he has been a leading voice with the transition of the modern gaming industry. In addition, Robert is a member of the American Gaming Association's Regulatory Reform Committee and has assisted in the development of key industry white papers and other publications.

His practice includes regulatory analysis and policy development, casino supplier licensing, licensing transfers, non-compliance appeals, Internet trademark licensing agreements, issue management, association management, legislative monitoring, and lobbying. Robert has extensive experience in the gaming industry, having assisted in licensing appeals and other gaming issues in over 70 jurisdictions. Robert is also a member of the International Association of Gaming Advisors.

End of Proposal

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#### ATTACHMENT "A"

## THE FLORIDA LEGISLATURE Part 1 DISCLOSURE INFORMATION

#### PARTNERSHIP OR INDIVIDUAL

I hereby certify that I, if an individual, or each of us, if a	partnership, doing business as
is not now involved in nor have I ever engaged in any pri with the Florida Senate, the Florida House of Representatives.	
I further certify that neither I, nor any partner, if a partner that any of the above designated persons or any other emsecure the appointment of	rship, nor anyone acting in my or our behalf has requested ployee of the Florida Legislature exert any influence to under this proposed agreement.
If partnership, each partner must sign and execute.	
Signature:	_ Title:
Signature:	_ Title:
Signature:	_ Title:
COMPANY OR CORPORATION	
I hereby certify that neither I, nor any owner, officer, directly are presently engaged in or have ever been engaged in an indirectly, with the Florida Senate, the Florida House of Florida Senate or the Florida House of Representatives.	(Name of Corporation/Company)
I further certify that neither I, nor any owner, officer, dire anyone acting on its behalf, has requested that any of the Florida Legislature exert any influence to secure the appounder this proposed agreement.	above designated persons or any other employee of the
Signature:	Title: PRESIDENT

#### ATTACHMENT "B"

## THE FLORIDA LEGISLATURE Part 1 NON-COLLUSION STATEMENT

I certify that this ITN Reply is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a reply for the same ITN and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this ITN and certify that I am authorized to sign this ITN for the represented Vendor and that the Vendor is in compliance with all requirements of the Invitation to Negotiate including, but not limited to, certification requirements. In submitting a Reply to the Florida Legislature, the Vendor offers and agrees that, upon the ITN's acceptance, the Vendor is deemed to have sold, assigned, and transferred to the Florida Legislature all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of Florida relating to the particular commodities or services purchased or acquired by the State of Florida or its political subdivisions.

Vendor Name:	The Innovation Group
Certified by: _	Michael Soll, President  (Print or type name of owner, officer, or authorized agent)
Signature:	MI All Title: PRESIDENT

#### ATTACHMENT "C"

## THE FLORIDA LEGISLATURE Part 1 WARRANTIES

The Respondent represents that it is professionally qualified and possesses the requisite skills, knowledge, qualifications and experience to provide the required services specified. The following are warranty certification requirements that must be certified in writing using Attachment C. If the Respondent cannot so certify to any of the following, the Respondent must submit with its Response a written explanation of why it cannot do so within the Administrative Documents Required.

- 1. The Respondent or any other organization associated with the ITN is not currently under suspension or debarment by the State or any other governmental authority.
- 2. To the best knowledge of the person signing the Response, the Respondent, its affiliates, subsidiaries, directors, officers, employees of any other organization associated with this ITN are not currently under investigation by any governmental authority and have not in the last ten years been convicted or found liable for any act prohibited by law in any jurisdiction involving conspiracy or collusion with respect to bidding on any public contract.
- To the best knowledge of the person signing the Response, the Respondent, its affiliates, subsidiaries, directors, officers or any other organization associated with this ITN have no delinquent obligations to the State, including a claim by the State for liquidated damages under any other contract.
- 4. To the best knowledge of the person signing the Response, the Respondent, its affiliates, subsidiaries, directors, officers or any other organization associated with this ITN have not within the preceding three years been convicted of or had a civil judgment rendered against them or is presently under indictment for or otherwise criminally or civilly charged for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a federal, state, or local government transaction or public contract; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
- 5. To the best knowledge of the person signing the Response, the Respondent, its affiliates, subsidiaries, directors, officers or any other organization associated with this ITN have not within a three-year period preceding this certification had one or more federal, state, or local government public transactions terminated for cause or default.

Certified by:	Michael Soll, President
Signature:	(Print or type name of owner, officer, or authorized agent)  Title: PRESIDENT

#### ATTACHMENT "D"

#### THE FLORIDA LEGISLATURE PART 1

#### **REFERENCES for The Innovation Group Project Team**

(Name of Respondent)

Provide the following reference information for a minimum of three businesses where services of similar size and scope have been completed.

Make additional copies as necessary to provide a maximum of five business references.

Business Name	State of Illinois – Governor's Office
Address	100 West Randolph Street, Suite 16-100
Contact Person	Amalia Rioja – Deputy Chief of Staff
Phone Number	312.814.5299
Fax Number	
Email Address	Amalia.Rioja@Illinois.gov
Date and Description of Services	Date: 2012 The Innovation Group recently completed work for the Office of the Governor, Patrick Quinn. The project included analyzing multiple development scenarios and tax structures to determine the optimal strategy for casino expansion in the state. This work was completed as a continuation from a previous project for the state that included analyzing the impacts of the Lottery and ambient video lottery terminals (VLT's) being introduced across the state.

Business Name	Pennsylvania Treasury
Address	129 Finance Building, Harrisburg, PA 17120
Contact Person	Christopher Craig – Chief Counsel
Phone Number	717.787.2465
Fax Number	
Email Address	ccraig@patreasury.org
Date and Description of Services	Date: 2003 and 2011 In support of a bill that became the basis for subsequent gaming legislation and a state goal to generate \$1 billion in revenue, The Innovation Group conducted a gaming market analysis (using a gravity model at the statewide level) to determine the number, size and location of gaming licenses for 12 proposed facilities. Multiple scenarios were addressed in order to determine the distribution which would maximize state tax revenues and ensure viable developments. The report also included a financial analysis of the break-even point for development given a proposed \$50 million license fee and construction and financing costs. The recommendations of the report were eventually accepted by the state and incorporated into legislation. Following the passage of the bill, The Innovation Group also took a lead role on Philadelphia's Gaming Advisory Task Force to recommend optimum locations for gaming facilities in the city.

Business Name	State of Nevada Health and Human Services
Address	4126 Technology Way, Room 100 Carson City, NV 89706-2009
Contact Person	Laurie Olson, Chief, Grants Management Unit
Phone Number	(775) 684-4020
Fax Number	(775) 684-4010
Email Address	lolson@dhhs.nv.gov
Date and Description of Services	7/1/2006-present; Principal Investigator and Director, Nevada Problem Gambling Project. This Project is a longitudinal study that tracks all of the problem gamblers who enroll in state-funded treatment programs over time, to evaluate impacts, treatment effectiveness, and demographics of those in treatment for gambling problems. Currently one of the world's largest databases of problem gamblers, and it has been funded by the State of Nevada since problem gambling funding was first set aside in 2006.

Business Name	Bank of America/Merrill Lynch
Address	4 World Financial Center, North Tower 9 <sup>th</sup> Floor, New York, NY 10080
Contact Person	Jeffrey Carey, Managing Director
Phone Number	212.449.0683
Fax Number	
Email Address	Jeffrey.carey@baml.com
Date and Description of Services	The Innovation Group has had a longstanding relationship with Mr. Carey, who is one of the leading private investment bankers covering the gaming and casino industry in the country. Mr. Carey has utilized The Innovation Group's independent third party evaluation services to determine the feasibility of gaming developments for funding purposes.

<b>Business Name</b>	Ontario Lotteries and Gaming Commission
Address	4120 Yonge Street, Suite 500, Toronto, ON
Contact Person	Samuel Heath, Executive Director
Phone Number	416.224.4937
Fax Number	
Email Address	Sheath@olg.ca
Date and Description of Services	Date: 2008-2012 The Innovation Group is currently a vendor of record with OLG and has a long standing positive relationship with the organizations. Most recently, we have provided analytical and econometric support as OLG prepares to privatize and modernize over 25 casinos and slot clubs in the Province. Prior to that project, we have provided a gaming market assessment for the Detroit – Windsor Market, five year budgeting and costing support analysis for the Caesars Windsor Property, multiple gaming market analysis for submarkets within the province to evaluate the revenue potential of the markets.

#### ATTACHMENT "E"

# THE FLORIDA LEGISLATURE Part 1 TWO-PART GAMING STUDY RESPONDENT'S PRICE REPLY (Separate Sealed Envelope)

Per the ITN, this financial information is submitted and sealed in a separate envelope.

## ATTACHMENT F - SUMMARY OF SIMILAR PROJECTS

#### The Innovation Group

#### Domestic Government Experience

#### City of Philadelphia Gaming Task Force

The Innovation Group was chosen as the lead consultant by the City of Philadelphia to evaluate proposed gaming locations in terms of their revenue potential and socio-economic impacts to assist this mayoral task force.

#### Maryland Senate

Paul Girvan, a Managing Director/Partner of The Innovation Group and member of our proposed project team, testified before the Maryland Senate and provided revenue estimates in support of the legislation in 2004 and then again in 2007. The bill's success was partially based on our projections of gaming revenues that the state could put into its school system.

#### State of New Hampshire

The Innovation Group prepared an analysis of the potential New Hampshire gaming market for the state legislature in considering options for development. Following a preliminary review of the state, The Innovation Group developed six scenarios involving one or two casinos in three locations around the state. The scenarios were developed considering the state's two goals of maximizing revenue to the state and providing economic development opportunities to specific regions. The analysis projected both increased gaming revenues as well as potential impacts on other industries in the state such as the pari-mutuel industry, restaurants and bars, and increased governmental costs in the areas of enforcement and regulation.

#### International Government Experience

#### Government of Jamaica, Tourism Development & Strategic Planning Advisory Services

The Innovation Group has been retained and is working on an on-going basis for the Government of Jamaica's Public-Private Joint Venture to develop leisure and tourism attraction on the Country's north coast between Montego Bay and Ocho Rios in an area called Harmony Cove. The Innovation Group provided strategic planning, feasibility analysis, economic impact analysis, capital cost estimates and business planning support for a master plan development that will leverage landside uses drawing from a new cruise ship terminal at Falmouth and include hotels, casinos and other themed recreation all based upon a cultural fabric embedded in the country's musical history. The Innovation Group has played a key role in sourcing management for the proposed property, and structuring the operating agreement for management.

### Government of Bermuda and the Bermuda Hotel Association (BHA)

The Innovation Group was engaged to provide consulting services to the Bermuda Government and the Bermuda Hotel Association regarding the potential implementation of gaming in Bermuda. This highly visible project involved working for a combined public/private client (a joint effort between the Government of Bermuda and the local Hotel Association) and was of a highly comprehensive and complex nature. In order to help determine the potential and methodologies for the tourism-focused jurisdiction, we applied a series of qualitative and quantitative tools including a gaming market assessment, a legislation study, tax considerations, and economic / social impact assessments.

#### National Government of Panama

The Innovation Group assessed the potential gaming market in Panama under a number of scenarios relating to privatization, facility placement, and mixture of full casinos and slot rooms. Subsequent to our analysis, the state-run, hotel-based casinos and slot rooms were privatized and upgraded by international operators.

#### EUROPE

# Government of Krasnodar, Russia: Building Plan Review, Gaming Market Assessment and Economic Impact Assessment

During 2007 The Innovation Group evaluated the opportunity to develop a destination gaming and entertainment resort area on the Sea of Azov in Krasnodar, Russia. Our work included financial feasibility analysis (projected development costs, forecasted revenues, and expenses), forecasted long-term potential for the region as a destination, as well as the development of parameters for a Request for Proposals for potential developers and operators.

The Innovation Group also completed a gaming market assessment and economic impact assessment for Rostov-on-Don, Russia, which involved a review of a specific building plan assumption. This study involved a comprehensive review of potentially competing gaming and tourism markets, input into those market segments and opportunities that might exist for a facility at the proposed location, and preparation of revenue forecasts and operating projections for a proposed new casino facility. An economic impact study of the proposed development was also completed.

# Additional North American Experience

#### **ECONOMIC IMPACT STUDIES**

### Florida Statewide Economic Impact Analysis

The seven major racing operators in Florida engaged The Innovation Group to analyze the potential economic impact of the tax rate adjustment and addition of table games that are currently being discussed for the state of Florida. The goal of the assessment was to determine the aggregate construction expenditure and annual gaming revenue potential for Dade and Broward county pari-mutuel facilities assuming anticipated competitive environment and proposed legislative changes.

# City of Bridgeport

The Innovation Group was hired by the City of Bridgeport, Connecticut, to act as their consultant in the evaluation, analysis, and development of policies pertaining to gaming in the city. The firm assisted the City in the development of draft gaming legislation to ensure that legislation was beneficial to the city and included testifying before Connecticut State legislative committees. The Innovation Group conducted a market assessment of various gaming scenarios and determined the economic impact of gaming in the city. Sites in the city were evaluated for their suitability for gaming operations, and traffic impacts were determined for various sites.

# Mile High USA, Inc., Aurora, Colorado

Mile High USA retained The Innovation Group to complete an Economic Impact Assessment for the potential addition of Video Lottery Terminals ("VLT's") at Arapahoe Park in Aurora, CO, including an optional scenario assuming the addition of VLT's to the South Colorado Gaming and Events Center in Pueblo, CO as well. We delivered a report including patron demand and revenue forecasts for each selected location; a sizing and supply distribution analysis looking at the appropriate number of VLT's for each site; an estimate of cannibalization to existing CO casinos; and an estimate of net direct and indirect economic impacts associated with construction and operation of each development, including a community needs assessment.

### Kentucky Statewide Market & Social Impact Assessments

The Innovation Group was engaged to provide a statewide gaming market assessment, return on investment analysis and economic impact study for (2) two gaming scenarios in Kentucky. The first scenario assumed full-service slot and table gaming facilities at the state's (7) existing racetracks. The second scenario included several non-racetrack gaming locations. Using a gravity model, we developed revenue estimates, sizing and local capture potential from residents currently traveling out of state to gamble. The Innovation Group also conducted a qualitative study regarding the social cost of gaming, focusing on the impact to existing businesses in the area. A strategic plan acceptable to all participants was presented to the legislature with The Innovation Group providing supporting expert witness testimony regarding the findings.

### Caesar's Entertainment, Suffolk Downs, Massachusetts

Caesar's Entertainment retained the Innovation Group to complete an analysis of the potential social and cultural impacts of casino at Suffolk Downs per the State of Massachusetts's Gaming Legislation. The report updated a feasibility study we conducted in 2009 with added analyses on the impact a casino could have on local and small businesses, bankruptcy, problem gambling, property values, unemployment, cultural institutions, and the Massachusetts State Lottery.

# Las Vegas Sands, Bethlehem, Pennsylvania: Housing and Tourism Impact Study

General Scope: The Innovation Group completed an impact analysis of a proposed casino in Bethlehem, Pennsylvania, detailing the impact to the local housing market and existing tourism market. Comparisons were made to changes in housing values of other jurisdictions where gaming has been initiated. Impacts studied included the existing tourism market as well as potential new tourism opportunities generated by the development and indirect benefits from advertising and increased visibility. The study also included analyses of historical and other cultural impacts.

#### GAMING MARKET ASSESSMENTS AND RESEARCH RELATED PROJECTS

# Deutsche Bank, Atlantic City & Las Vegas Overview

For Deutsche Bank, The Innovation Group provided an analysis which demonstrated historical growth rates of gaming at commercial properties in the U.S. during the past five years, and projected growth during the next five years. Additionally, historical data for the Las Vegas Strip and Atlantic City markets were provided to demonstrate how market growth is influenced by supply changes, along with a scheduled pipeline of development for each market for the next five years. The report was developed in the context of emerging competition from slot facilities in New York City and Pennsylvania, two major target markets for the Atlantic City casinos.

#### Due Diligence for Various Gaming Markets

In 2009, The Innovation Group was engaged to provide due diligence, including demographic and profile data along with a competitive review of the gaming markets in Las Vegas, Pittsburgh, Detroit, and Vancouver. Our research included such considerations as total market revenues, population and other demographic details, win per device summaries, monthly slot and table revenues, and other relevant data.

#### Detroit Area Market Assessment

The Innovation Group was engaged by a confidential investment group to assess the gaming revenue potential of the Detroit metropolitan area. We provided market-specific feedback regarding key participants, overall performance and potential of future developments. Our final work product featured a preliminary revenue assessment and memorandum indicating market potential.

# Foxwoods Resort Casino, Mashantucket, Connecticut: Research, Analysis, Strategic Planning

General Scope: The Innovation Group has been working for the Mashantucket Pequot Tribal Nation for many years, during which time we have completed a variety of projects related to the tribe's strategic plan and expansion program. A multi-year feasibility analysis included casino, hotel, convention/meeting space, entertainment, and F&B components and incorporated detailed consumer surveys and multiple focus groups to help frame and validate the building program. Included were an extensive series of focus groups to study untapped segments of gamers, non-gamers and various ethnic groups. The strategic research also examined what amenities and marketing programs would be most appealing to each segment. We also developed operating pro forma and return-on-investment analyses for multiple competitive scenarios to facilitate Tribal decision making.

For the majority of the projects, we employed a gravity model calibrated against the geographic distribution of the tribe's player database. The analysis incorporated the impacts of new competition under various scenarios on the existing property and on the proposed expansion program. This also included development of projections and recommendations for hotel, F&B, entertainment and other components. Our analysis included ongoing development of pro formas and ROI analysis. External benchmarking and trend analysis was also completed throughout our 10 year analysis to allow the Tribe to see the impacts of the decisions they were making.

# Pechanga Casino-Hotel and Ancillary Facility Research and Feasibility Study, Temecula, California

The Innovation Group has completed numerous projects for the Pechanga Band of Luiseno Indian's Pechanga Development Corp. including financial feasibility studies for a casino expansion, a hotel development, an entertainment complex and convention/meeting facilities. For these studies we conducted primary consumer research for both the initial development of the Pechanga Resort as well as subsequent expansion projects. Additionally, a highest and best use assessment was performed to determine the most appropriate strategic development scheme for additional tribal land near the casino site. Ancillary facilities investigated included a golf course, driving range, RV Park, amusement center, gas station, convenience store and retail outlet.

# Regulatory Management Counselors, P.C. (RMC)

# Domestic Government Experience

# AGA Task Force on Regulatory Reform

RMC has played a very active role as part of the American Gaming Association's Task Force on Regulatory Reform. They worked closely with the AGA and its legal counsel in the development of a best practices white paper entitled *Improving Gaming Regulation: Ten Recommendations for Streamlining Processes While Maintaining Integrity* that made numerous suggestions on improvements that can be made to the regulatory practices followed in gaming jurisdictions throughout the world. RMC also worked to seek to implement changes in the state of Michigan, where the regulators expressed a desire to implement practical regulatory changes in a way that still assures integrity.

# Gun Lake Tribal Gaming Commission

RMC worked with a newly formed tribal gaming commission to draft regulations and successfully implement a regulatory program for the oversight of a casino located in western Michigan. Following a review of the unique gaming compact and tribal gaming ordinance, RMC working closely with the members of the Commission developed a comprehensive regulatory system for the licensing and regulation of the casino, its employees and suppliers in a cost effective way.

# States of Ohio and Pennsylvania - Rule Making Process

RMC professionals worked on the implementation of commercial casino gaming in the States of Ohio and Pennsylvania. RMC was actively involved in the monitoring of the development of the regulatory process with respect to casino operator and supplier licensing, as well as issues related to casino financing and debt transaction approval.

# Township of Vanderbilt Michigan Casino Analysis

RMC worked with a newly formed tribal gaming commission to draft regulations and successfully implement a regulatory program for the oversight of a casino located in western Michigan. Following a review of the unique gaming compact and tribal gaming ordinance, RMC working closely with the members of the Commission developed a comprehensive regulatory system for the licensing and regulation of the casino, its employees and suppliers in a cost effective way.

# Wayne County Michigan

RMC acted as a strategic business and legal advisory firm assisting the County's Executive office in the evaluation of various gaming industry related proposals. In this role, RMC analyzed and assessed numerous projects and proposals over several years assisting the County in evaluating how realistic such proposals were and the potential legal and regulatory costs that would be associated with the pursuit of such projects. RMC further served as strategic advisor to the County exploring the potential for attracting gaming industry related suppliers to the County to seek to create a job base

beyond the employees of the various gaming related operations (casino, racetrack, charitable, and lottery related facilities).

# UNLV

# Domestic Government Experience

#### State of Nevada Health and Human Services

UNLV acted as a principal investigator and director with The Nevada Problem Gambling Project. The Project is a longitudinal study that tracks all of the problem gamblers who enroll in state-funded treatment programs over time, to evaluate impacts, treatment effectiveness, and demographics of those in treatment for gambling problems. The Project has put together one of the world's largest databases of problem gamblers, and it has been funded by the State of Nevada since problem gambling funding was first set aside in 2006.

### UNLV Caesars Hospitality Research Center

UNLV completed grant-funded project entitled "Evaluating the Impact of Taxation Rates on Casino Development," which examined the ways in which various state tax structures in the U.S. correlate with development investment – yielding a first-of-its-kind academic report in this field that will provide an important foundation for this project.

# International Government Experience

# Canadian Gaming Association

UNLV crafted a summary and critical review of all of academic literature published to date on introducing new casinos into the Canadian communities, with particular focus on social impacts and economic effects.

# Nova Scotia (Canada) Gaming Corp

Members of the UNLV community, Dr. Bernhard and Dr. Richard Wood, were awarded a NSGC grant to provide an in-depth analysis of Nova Scotians' perceptions of responsible gaming and government attempts to address this key issue. This project determined the effectiveness of responsible gaming (RG) messaging, evaluated whether the tone and content of the messages were appropriate, and provided recommendations to NSGC on RG program approaches moving forward. The project also included a comprehensive literature review of RG-oriented research, which will serve as a foundation for this report. This quantitative and qualitative analysis was completed on time and under budget, and was highlighted in an opening keynote at NSGC's annual conference.

# ATTACHMENT G – SAMPLE OF RESPONDENT'S WORK PRODUCT

The Respondent shall include evidence of its qualifications and capability to provide the services in the Scope of Work for Part I of Two-Part Study described in this ITN by describing its organizational background and experience.

The description shall include:

(c) A sample of the Respondent's work-product on a project similar in nature, size and scope; and

We have provided a sample of our work product for the Government of Bermuda and the Bermuda Hotel Association below.

# Bermuda Gaming Study

# Prepared for:

Bermuda Task Force on Gaming 25 Belmont Hills Drive Belmont Hills, Warwick WK06 Bermuda

May 2009



# Prepared by:

The Innovation Group 7852 S. Elati Street, Suite 100 Littleton, Colorado 80120

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# INTRODUCTION

The Innovation Group was engaged by the Government of Bermuda and the Bermuda Hotel Association, to provide consulting services with regard to the potential implementation of gaming in Bermuda. Specifically, we have been charged with recommending a gaming platform for the country that balances the tourism development goals of government with the array of potential economic benefits and reciprocal impacts associated with different implementation scenarios.

Bermuda presently has an extremely advanced and sophisticated economy but has virtually no legalized gambling. While tourism has historically been the leading industry in the country, it has declined over the last 30 years based upon a variety of factors including significant increased competition for leisure travelers from other competing markets.

The implementation of casino gaming in a country that currently does not have legalized gaming must be evaluated from several different perspectives as there are a number of alternatives and approaches that can be considered. The overall objectives of the government will play a role in determining which format and to what extent gaming is permitted. In the case of Bermuda, rejuvenating tourism is the primary reason that the government has decided to evaluate the topic of legalized gaming.

There are a multitude of questions and issues that potentially arise when considering how Bermuda might move forward with some form of legalized gaming. These topics range not only from what form of gambling is best suited for the country and would have the biggest net positive impact on tourism development, but they also include topics such as the locations for gaming, the number of licenses that should be permitted, and the regulatory and tax framework that should be established. In addition, Bermuda needs to consider the potential social and economic impacts that the introduction of gaming could potentially have.

To answer these and other questions and provide the Bermuda Government and the Bermuda Hotel Association with a blueprint for moving forward, The Innovation Group completed a series of quantitative and qualitative analyses. In completing our study we utilized case studies from other jurisdictions and our own proprietary research and financial models as well as data from third party sources.

# Scope of Work

The Innovation Group's Scope of Work was segregated into five (5) general Tasks as summarized below:

# Task I: Gaming Market Assessment

Under this task, The Innovation Group quantified the gaming revenue potential for Bermuda utilizing models that we have developed for other jurisdictions. In this task we identified and developed six alternative scenarios for casino style gaming. These alternatives were based upon various assumptions regarding locations, number of potential licenses and other factors. In addition, we examined the potential for small slot clubs where a small number of gaming machines would be allowed in various locations.

The Innovation Group examined the potential revenue impacts of legalized gaming assuming that both local Bermudians as well as tourists of legalized age (+21) would be allowed to participate.

# Task II: Gaming Legislation Study & Tax Considerations

Under this task, The Innovation Group evaluated various cases studies from other jurisdictions in an effort to arrive at recommendations with regard to the best potential legal format for gaming in Bermuda to meet the government's ultimate objectives. Included in this task are a discussion of the pros and cons of various approaches to the distribution of gaming locations and the number of licenses, as well as the type of regulatory environment that might best suit Bermuda if gaming were enacted.

We identified the four primary benefits to be derived from the installation of legalized gaming in any jurisdiction, as follows:

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

An important consideration for the Government of Bermuda if they were to enact gaming legislation is the appropriate tax structure. The tax rates and structure ultimately implemented can have a significant impact on the potential for a successful gaming industry in Bermuda. In order to develop a sustainable industry in the long-term, it will be important to have a tax structure that attracts additional capital investment while still deriving revenue through taxes and providing ample funding for tourism promotion, regulatory oversight and other associated costs.

The Innovation Group's analysis under this task examined the tax rate structure of current gaming markets in selected U.S jurisdictions as well as the Caribbean and Latin America. The analysis highlighted the negative consequences associated with an unstable tax environment or an exorbitantly high tax rate as experienced by certain gaming jurisdictions. The analysis also examined the impact of tax rates on capital investment and the ability of gaming operators to acquire capital at an economically viable rate.

# Task III: Lottery Assessment

In this task, The Innovation Group examined the potential for a Bermudian Lottery as a means to stimulate tourism and tourism infrastructure development. While a lottery in some fashion generally does not act as an influence in inducing overall visitation to a destination, it can be a mechanism to generate tax dollars which can be utilized to further promote tourism. Hence, introducing a lottery to Bermuda was examined as part of the overall introduction of gaming to the country.

To develop the demand for lottery products in Bermuda, The Innovation Group utilized several different approaches and models. Each approach was based on gaming trends in comparable locations, adjusted to reflect variations in economic and social conditions, accessibility, and the distribution of gaming opportunities.

# Task IV: Overview of Internet Wagering

An additional task as part of The Innovation Group's engagement was the evaluation of Internet Wagering as a prospective form of gaming for Bermuda. This form of gambling has become one of the fastest growing components of the gaming industry. Some jurisdictions such as The Isle of Man and Costa Rica have become havens for the support of internet wagering activities.

Governmental response to this rising market sector has varied. In the USA the emphasis has been on prohibition of internet gambling either based or played in the US. In Europe, on the other hand, the emphasis has been on a policy that allows limited, highly regulated (and often state controlled) gaming that is directed either at a country's own citizens or other legal jurisdictions. And in Australia, the Internet gaming market is much more liberalized, where companies can freely apply for licenses from the authorities in a number of states and territories, and participation is not limited to Australian citizens.

Developing and operating such a business in Bermuda was evaluated as a an option for the government However, issues such as controlling the process, the competitive nature of the industry and determining whether there are ultimate economic benefits and positive impacts on the tourism industry associated with the introduction of this type of wagering was part of our evaluation.

# Task V: Economic /Social Impact Considerations

While the overall primary objective of The Innovation Group's study was to evaluate the potential implementation of gaming in Bermuda and how it could enhance the tourism industry, a complete evaluation of situation must include an examination of the various economic and social implications of introducing gaming.

In this task we identified the potential direct and indirect impacts on local economic activity, employment, and on revenues and expenditures. In addition, we estimated the potential social impacts assuming casino style gaming was introduced under various alternatives. The social impact analysis included an evaluation of items such as public safety, crime, community services and behavioral aspects.

# CONCLUSIONS

The objective of the proposed introduction of casino gaming to Bermuda is based primarily on inducing tourist visitation by offering an activity that is important to a significant portion of the travelling public and which is present in many of Bermuda's competitors for leisure travel. As a result it is expected that this program will induce further visitation to Bermuda. Secondary goals include the generation of tax revenues to support more robust tourism initiatives.

Gaming, if established, will offer a complementary activity in Bermuda, where daytime activities such as golf and water sports are the primary activity. Based on interviews of hotel management and other tourism industry professionals, Bermuda formerly featured a higher level of entertainment and other evening activities. The drop in evening activities is a lost opportunity, in that some tourists will likely participate in gaming if it were available.

If gaming were to be introduced to Bermuda, casino operators in the country would be in competition with well capitalized and long established casinos in places such as the Bahamas and to a lesser extent other countries throughout the Caribbean, as well as with other major gaming destinations (South Florida, Las Vegas, etc.). In addition, these markets have had the advantage of cultivating gamer loyalty over the past years. Bermuda would face the added challenge of the co-evolution of new regionally competitive jurisdictions such as Jamaica that will have similarly tourism-focused goals driving new casino policies. Thus, it is imperative that Bermuda focuses on establishing policies which maximize the potential competitiveness of the gaming industry.

Despite its proximity to the population of major East Coast U.S. cities and its natural beauty, Bermuda has fallen behind many Caribbean and even Central American destinations for many tourists. While casino style gaming may not be viewed as a panacea to correct Bermuda's tourism challenges, the country is losing out on opportunities by not having casino gaming. Casino gaming is an industry that is now prevalent throughout the U.S. and Caribbean, has become socially acceptable for many adults, and is expected to remain strong in the near and intermediate future as many U.S. adults get older.

Definitively quantifying the amount of capital investment that might be attracted to the country for additional tourism infrastructure (i.e. additional resorts, rooms, amenities, etc.) should gaming be introduced is difficult as other factors such as the availability of capital influence the outcomes. However, the evidence is clear from other jurisdictions that given the right legislative policies, tax structures and operating environment, casino gaming can be a catalyst for additional tourism development. In order for Bermuda to effectively compete in the tourism arena in the region, it needs to attract additional capital investment. Gaming can be the catalyst that allows new projects to occur as gaming enhances the potential profits and consequently can work in attracting the financing new projects need.

We have summarized the key conclusions and recommendations from the various Tasks in the following section. Detailed findings and conclusions as well as a summary of our methodology and approach to the individual tasks, specific model calculations, and sources we utilized, are all contained in the relevant sections of the full report.

# Lottery

As part of The Innovation Group's overall engagement with regard to potential gaming opportunities for Bermuda, we were requested to evaluate the potential for the introduction of a lottery in Bermuda. In this portion of the engagement, it is recognized that a lottery does not typically generate tourism. However, an argument can be made that lottery revenues could be used to further support efforts of the government's tourism department through additional marketing and advertising expenditures, airlines subsidies or other measures.

Information and data that we have gathered and reviewed as well as an examination of travelers' preferences and habits indicates that the presence of a lottery is not likely to draw either additional tourists to Bermuda or attract additional capital to support tourism infrastructure.

Lottery sales tend to be generated primarily from local residents in an area or region. There are exceptions when consumers might cross a state or country border to purchase lottery tickets for large linked jackpots such as Powerball in the U.S.; however the incidence of this and the dollar amounts spent tend not to be significant. It is unlikely that any meaningful number of U.S citizens from U.S. cities where there are direct flights to Bermuda would view the introduction of a lottery as a reason to make a new or additional trip to the country. Consequently, the great majority of revenues generated from a lottery would be derived from play from local Bermudians.

Several studies, including those conducted by the National Gambling Impact Study Commission ("NGISC"), the Colorado Lottery, and the Texas Lottery have provided research on the demographics of lottery players in the United States. These studies indicate that lottery players largely mirror the public at large in terms of sex, age, and income levels. However, The NGISC commissioned a study conducted at the University of Chicago's National Opinion Research Council showed that men, African Americans, high school dropouts, and those with average annual household incomes lower than \$10,000 are more likely to spend more disposable income on lotteries. For this reason it has been argued that lotteries are a regressive tax as they appeal to players with lower incomes.

The motivation behind enabling lottery legislation is frequently politically motivated and centers on a government raising funds in an effort to improve the quality of life for its citizens. Popular programs that receive lottery funds include aiding the elderly and disabled, subsidizing education programs, supporting cultural institutions, and building infrastructure. In the case of Bermuda, it was specifically mentioned that revenue could be used to subsidize tourism budgets and attempt to drive further tourism. Broader

benefits include job creation, the reduction of illegal gambling activity, and the upgrades to information technology infrastructure.

The following chart summarizes the potential lottery revenues estimated by The Innovation Group under several different analytical approaches.

Revenue Estimates (\$US millions)				
Lottery Revenue/GDP	\$51.5			
Per Capita	\$17.3			
Participation Rate	\$17.3			
Average	\$28.7			
Average without GDP Estimate	\$17.3			

Source: The Innovation Group

Obviously, due to rounding, there is no discernable change in the revenue estimate when averaging the two population-based estimates. The Innovation Group maintains that this more conservative estimate is warranted for forecasting purposes for several reasons which are outlined in our study.

Based upon the limited level of potential lottery revenue and the fact that the great majority would be derived from local Bermudians with no significant increase in new employment, introducing a lottery to Bermuda is unlikely to meaningfully enhance the government's primary goal of stimulating increased tourism.

# Internet Gaming

Internet gaming has become a rapidly growing segment of the gaming industry. The Innovation Group has found however that there appears to be no significant or sustainable direct link between the presence of on-line gaming and tourism generation and/or the attraction of capital for tourism infrastructure development.

However, an internet wagering business in Bermuda could generate tax revenues which could then be utilized to further promote tourism through additional adverting and marketing spending, hence create an indirect impact on tourism. Such an approach, though, does not help to develop the tourism infrastructure, generate significant capital or assist Bermuda in developing a competitive advantage in luring additional tourists to the country.

Some of the positive aspects of attempting to develop an internet wagering business in Bermuda include:

- Opportunity to be the Industry Model-As the online gaming community is
  itself calling for greater regulation and oversight, Bermuda has the opportunity to
  step up and become a model for the industry as a whole.
- Revenue Generation-As revenues for online gaming operations continue to grow, there is potential for local revenue generation for countries hosting such

sites. However, it should be noted that online gaming operators have publicly stated that a taxation rate of over 10% would make operations difficult, and that countries attempting such a rate would not be sought out.

On the other hand, some of the potential negative aspects of the business include the following:

- Perceptions & Illegal Activity-While traditional gaming operations have been largely successful at thwarting accusations of corruption, scams, money laundering and the like, online gaming operators have not. The regulation and oversight afforded physical casinos has rooted out much of the illegal and unscrupulous activity once associated with gambling. However, the loose nature of the internet and of internet gambling does not adhere easily to such a regulatory structure and significant scandals and scams have resulted. The perception of illegal activity occurring within Bermuda's borders could serve to deter businesses in the financial sector from locating or maintaining their offices in Bermuda.
- Minimal Job Creation-Our review revealed that employment within the site's
  host country is not substantial. Many companies in the business have traditionally
  out-sourced much of the labor for their operations to India. Were online gaming
  companies to re-locate or incorporate in Bermuda, minimal impacts on
  employment could be expected
- Sticky Legal Environment-The legality of online gambling across the world remains unclear and messy. Any country attempting to become a host for online gambling sites will, inevitably, draw itself into debates and wrangling with the international community over the legality.
- Negligible Impact on Tourism-Internet gambling is not a tourism draw. Players
  in online casinos rarely concern themselves with the physical location of the
  gaming companies, and are rarely drawn for this reason to visit the host countries.
  While nations such as Costa Rica, Antigua and Barbuda have thriving tourism
  industries, these industries are based on their attractive natural environments,
  resorts, and the like, rather than their use as a base for computer servers for
  Internet casinos.

Consequently, in the case of Bermuda, the potential negative effects of hosting Internet casino companies potentially outweigh the benefits and more importantly, the introduction of internet wagering would not likely help achieve the primary goal of reviving the tourism industry in the country.

# Tax & Legislative Study

With the goal of enhancing tourism in a highly competitive environment, maximizing capital investment and thus the quality of the gaming product is especially important for Bermuda. Policies which are most likely to drive the intended results and which The Innovation Group recommends considering are as follows:

# Maximize the Potential to Create an Attractive, Internationally Competitive Industry

- The jurisdictions with the lowest effective tax rates often feature the most elaborate casino developments, such as in Las Vegas, Atlantic City, Mississippi, and The Bahamas. The profit margins enabled will allow for attraction of significant initial capital investment and subsequent reinvestment. Thus, institution of a low tax in the range of 10-15% is likely to induce the maximum level of investment and enhance tourism offerings through the development of an internationally competitive gaming product. Depending on the desired effect, a graduated tax rate for Bermuda could start in the 10% range, allowing smaller operators a chance to compete, while an upper range of 15%-18% would permit higher tax revenue while still supporting the government's partnership with the industry.
- Limit the number of major casinos to reduce competitive risk and encourage investment.
- Relevant to the size of the market opportunity, significant up-front license fees should be avoided. We do suggest a modest up-front license fee be established purely to help defray the costs of the regulatory, licensing and background investigation costs the Government of Bermuda will incur.. It would be advantageous to also design a minimum investment criteria or component guidelines for major resort-casinos; or to encourage an equivalent enhanced investment profile through a competitive bid process.
- Minimizing licenses may have an added benefit unique among the case studies featured in this report. With a small number of unemployed people on the island, and relatively expensive operating costs, a limited number of facilities will stand a better chance of operating profitably and minimize the negative effects that could take place with excessive expansion. We would note that excessive expansion in other jurisdictions did not lead to the growth in tourism that is the main goal of the enabling legislation.
- To the extent possible, limit direct restrictions on the casino operating environment such as hours of operation, betting/wagering limits and other items, which tend to limit revenue potential and/or increase costs.

# Maximize Impact on the Greater Tourism Product

 Allow smaller casinos at hotels that have greater than 100 rooms to bolster development of new hotel supply (new rooms) and subsequently induce incremental international tourist visitation via hotel marketing efforts and the overall improvement of the tourism product. Economics will determine the number and size of these.

- A graduated tax will increase the probability that smaller amenity type casinos will develop at hotels.
- Casinos operated in conjunction with hotels will be much more competitive in the
  region in inducing visitation. Many regular casino gamers that play in destination
  markets receive free or subsidized accommodations, food and beverage, and other
  resort amenities. Casinos located outside of hotels would simply have a more
  difficult time competing regionally with properties in the Bahamas, Puerto Rico,
  Aruba, Las Vegas, and Atlantic City.
- Allow an independent casino to be developed to accommodate locals and tourists seeking a larger, more energetic gaming environment. This property would likely be larger and, not being in a hotel, would likely attract the majority of the local patronage. The property would also appeal to tourists seeking a gaming experience that are not staying at hotels offering casinos as well as hotel guests that may seek larger casinos that typically feature more energetic environments. We have identified this situation as a possible stand-alone casino in downtown Hamilton.

### Maximize Stability in Tax and Regulatory Environment

- In order to create the stable market environment that will best induce the
  development of a healthy industry and long-term tourism benefits, offer a
  guaranteed period during which taxes would remain constant or within a set
  range.
- In order to create both the reality and appearance of a transparent and legitimate industry to global gaming investors, operators, and patrons alike, it is imperative to create a strong regulatory and oversight mechanism (such as a properly empowered, and funded Gaming Control Board or Commission) which can enforce the operating guidelines established for the industry. Such an authority will ensure confidence among investors and fairness to gaming patrons. Furthermore, the authority will guarantee that there is no tint of corruption our criminal involvement within the jurisdiction. This is necessary to attract major international gaming companies with licenses at risk in other jurisdictions, and also broadens the availability of debt financing to those companies.
- The Innovation Group has estimated that the annual costs for establishing and maintain a Gaming Commission or Board as well as investigators, licensing, and auditing. The estimated annual costs to oversee casino gaming were estimated at \$2.2 million for three large casinos. These costs are obviously outside of costs that we assume would be absorbed by the appropriate Bemudian government agencies as it relates to developments in the normal course of business (i.e. zoning, construction permitting, etc.) This regulatory structure may be supported by a separate fee paid by licensees and prospective licensees so that the structure is

fully supported regardless of how gaming revenues of the industry might fluctuate.

# Maintain a Healthy Gaming Industry

- A portion of annual tax revenues should be used directly to offset community
  costs and potential negative social impacts associated with the development of
  gaming. Based upon our revenue estimates as well as costs for social impacts on
  law enforcement, fire protection and services for problem gambling, 1.5%-2.5%
  of annual gambling revenues (depending upon the ultimate scenario that is
  adopted) should be adequate to cover these costs.
- A portion of annual tax revenues should be earmarked for government based marketing and promotional efforts, targeting consumers who might see the presence of legalized gaming in Bermuda as a draw. Given the significant dollars spent currently by the country to promote and support tourism, it is not expected that this figure needs to be significant (i.e. 2% of gaming revenues).

# Casino Gaming Market Assessment

There are no known examples of tourism destinations in which a lottery or internet wagering is a major driver of tourism visitation and a draw for tourism capital investment. Conversely, casino style gaming in some format has proven to be a viable alternative for jurisdictions when it comes to stimulating tourism, under the right circumstances. The key to any legislation implementing gaming in Bermuda needs to take into account the opportunity to create the following benefits:

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

To fully evaluate the opportunity for Bermuda, potential revenue numbers were developed under a number of scenarios. From these estimates, the positive impacts to the country on taxes, jobs and tourism development were estimated

The Innovation Group examined a number of case studies to demonstrate casino gaming and its relationship to tourism. These jurisdictions included Cyprus, Puerto Rico, Monaco and Chili.

Bermuda's location and access to the major metropolitan areas of the Eastern United States provides a dynamic opportunity for the tourism industry. With approximately 25% of U.S. adult leisure travelers stating that the ability to participate in casino gambling while on vacation is important to them, Bermuda is at a disadvantage to other jurisdictions, particularly in the Caribbean, in attracting these potential visitors. More importantly, as a catalyst casino gaming will enhance the attractiveness of Bermuda for

potential investors by not only adding an attractive amenity to a resort, but also providing an additional source of cash flow upon which capital can be raised.

While our initial Scope of Work conceded up to four (4) different potential scenarios for casino gaming, during the course of our work it became evident that several additional alternatives should be evaluated. In the end we completed six (6) different alternatives. The various scenarios were completed based upon different opportunities with regard to where licenses might be located in an effort to provide the most convenient alternatives for tourists (and in an alternative scenario residents also).

Potential locations include a casino based in Hamilton, the Dockyard, and St. George, as well as casinos established at existing hotel properties and possibly in bars or taverns. Scenarios were defined in order to provide insight into different operating environments that were discussed during meetings with government officials and tourism industry professionals, and to incorporate The Innovation Group's knowledge of existing gaming markets, the most prominent being discussed in case studies within this report.

These scenarios are defined in the following table, where elements included in each respective scenario are marked with an "X". In scenario 1, a single casino in Hamilton was selected as the only location to offer gaming. This casino is listed as "Independent" as it is not assumed to be part of a hotel. Scenario 2 adds independent casinos in Dockyard and St. George. Scenario 3 further adds casinos at large hotels, defined as hotels with 100 rooms or more. Scenarios 4 and 5 both remove independent casinos while 5 adds gaming at small hotels. Scenario 6 considers one casino in Hamilton and gaming in large hotels.

Scenario Summary						
Scenario	1	2	3	4	5	6
Independent Casinos						
Hamilton	X	X	X			X
Dockyard		X	X			
St. George		X	X			
Hotel Casinos						
Large Hotels <sup>1</sup>			X	X	X	X
Small Hotels <sup>2</sup>					Χ	

Source: The Innovation Group

Independent casinos were assumed to be located in central areas accessible from cruise ship docking facilities, water shuttle terminals, taxi stands, and the public bus system. These facilities as well as those located in hotels were assumed to be visible with signage guiding potential patrons and attractive and clean in their appearance. Ingress

<sup>1)</sup> Large Hotels are defined as including over 100 rooms and include Elbow Beach, Fairmont Southampton, Fairmont Hamilton, Grotto Bay, Newstead Belmont, Tucker Point and the proposed Hyatt

<sup>2)</sup> Small Hotels include properties with less than 100 rooms

and egress for vehicles was assumed to be adequate at times of peak visitation with ample parking for guests.

Our estimates of gaming revenues for each of the scenarios were based upon several key assumptions:

- Proposed hotel room additions, as described in the report, will come online by 2011;
- In each of the scenarios presented, properties and the Bermuda Department of Tourism both undertake significant marketing efforts both on the Island and in the key source markets for visitation;
- Hotel operators will employ professional marketing programs, including advertising and promotion, instituted prior to opening, and maintained throughout the period of analysis;
- A significant effort to drive mid-week casino patronage is successful;
- The U.S economy will stabilize and begin recovery in 2010;
- No significant economic or visitation fluctuations will occur during the period of analysis; and,
- It is expected to take some time for induced visitation to ramp-up to its full potential.
   Several markets have historically taken some time to ramp-up, and with the growing familiarity of gaming in source markets, it is estimated that substantial marketing efforts will enable Bermuda to reach its full induced potential over three years.

In order to project potential gaming revenues under each of the scenarios, various potential customer segments were evaluated and examined. These segments included 1) local Bermudians 2) existing tourists, and most importantly, 3) induced visitation as a result of the introduction of casino gaming. The possibility to attract induced visitation as a result of the introduction of casino gaming is potentially the most significant source of growth for the tourism industry in Bermuda. Several other destinations, including Atlantic City, Las Vegas, Puerto Rico, Macau, and the Bahamas have attracted new visitors with the introduction of gaming or the addition of significant additions to supply

Combining revenues from all sources, the proposed Bermuda casinos are estimated to generate between \$83 million in Scenario 1 and \$145 million in Scenario 3 in 2011. The following table summarizes the gaming revenues by market segment:

**Gaming Revenues** 

Market	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Local Market Revenues	\$18,806,426	\$23,723,729	\$25,569,038	\$20,578,738	\$21,248,195	\$23,917,974
Visitor Market Revenues	\$64,840,869	\$90,206,405	\$119,530,074	\$100,893,083	\$101,311,092	\$106,533,726
TOTAL GAMING REVENUES	\$83,647,295	\$113,930,134	\$145,099,112	\$121,471,821	\$122,559,287	\$130,451,699
Gaming Positions	875	1,656	1,986	1,649	2,388	1,911
Win per Position	\$262	\$188	\$200	\$202	\$141	\$187
Win per Visit	\$183	\$167	\$181	\$197	\$195	\$196
Win per Occupied Room (Island-wide)	\$135	\$179	\$208	\$178	\$180	\$188

Source: The Innovation Group

The introduction of casino gaming to Bermuda could generate potential gaming revenues between \$84 million and \$146 million annually (based upon Year 2 revenue forecasts). However, the gaming revenue estimates are only one piece of a complex analysis regarding the overall impact to the country. The gaming revenue forecasts that were generated formed the basis for further analysis on the overall economic and social impacts that the introduction of gaming might have to Bermuda. For instance, from an Economic Impact perspective, the gaming revenue numbers do not reveal the full impact on overall tourism generation and hotel occupancies. In addition, the introduction of any form of gaming may have hidden social impacts that need to be accounted for and properly addressed.

# Casino Sites and Locations

Although no decisions on gaming in Bermuda have been made, nor any legislation developed, and guidelines for locations have yet to be established, it is apparent based on discussions with Bermudian officials and citizens, as well as feedback gathered through the mail, online, and through forums, that if casinos were established in Bermuda, it likely that the quality and quantity of facilities would have to conform to the overall positioning of the island country. Hence, it is our recommendation, based upon these factors as well as the limited revenue potential for the country, that there should be a limited number of licenses strategically located in the country. These locations may be present in larger hotels as well as inone centralized facility. These these facilities should also conform to the quality of product that the existing and expected tourists prefer.

Having the ability to offer casino gaming within the confines of a hotel or resort would provide operators with another valuable marketing tool. However, The Innovation Group recommends that only resorts or hotels that have a minimum of at least 100 rooms be allowed to offer casino gaming for the reasons noted below.

 The costs to start up and operate casinos in every inn, resort, hotel or motel based upon the results of our pro forma operating statements suggests that too many smaller facilities will create significant inefficiencies thereby leading to the development of lesser quality product offerings and/or inevitable failure;

- The costs to regulate and monitor numerous smaller facilities could be significant to the government;
- The lack of experienced employees and availability of employees in general would lead to significant labor operating costs;
- The diffusion of gaming customers around the country to many different locations could create a less than appealing casino environment for tourists and local Bermudians alike. Casino players generally prefer environments that are active; and
- In order to attract investment capital to the country for the development of additional
  tourism infrastructure, such as new rooms, resorts, and amenities, developers and
  operators need to be able to establish an appropriate set of returns to satisfy their
  investors and ultimately finance developments. Limiting the number of licenses to
  only those larger hotels will result in more favorable investment conditions..

In addition, the results of our Pro Forma Operating Statements, indicates that only a few existing and prospective hotels would likely actually move forward with the development of casinos as part of their resorts under the proposed structure given the upfront capital costs as well as the costs to operate.

In addition to hotels, centralized casinos may make sense in a number of other locations. Providing a limited number of stand-alone casinos, such as in Monte Carlo, can enhance the overall environment.

During our site visits we identified a number of potential sites for stand-alone casino development. In addition, any casino gaming that might be implemented at larger hotel sites was reviewed in the event that a larger facility was purpose-built as a casino or casino hotel. These potential locations, in addition to the hotel facilities already located on the island, were considered as potential casino locations.

Given the dynamics of the Hamilton market both for local Bermudians and tourists, a location in Downtown would provide an opportunity for a destination casino similar to a Monaco situation. If properly positioned and marketed, the casino could be part of the overall development that could act as a draw not only to Hamilton but to Bermuda as a whole for tourists and travelers form the eastern U.S.

The Innovation Group understands that sites within the Downtown Hamilton area that can be developed as a potential site for a stand-alone casino are limited and the process for identifying, securing and/or acquiring a site could be complicated. In addition land costs are exceedingly high, although there appears to be a general consensus among the various government entities that re-developing the waterfront is a priority. Hence a number of options need to be explored further in terms of how property might be secured for purposes of gaming. Ultimately, an open, public bidding process initiated by a request for proposals ("RFP") will likely be necessary. This process will ensure that an optimal investment is made with the stated goal of inducing tourism while allowing all interested parties to leverage their experience and creativity for consideration.

Singapore is a recent example of how a government developed an RFP to attract potential developers, though we would point out that the scale of development slated for Singapore is larger than what is recommended for Bermuda Singapore legalized casino gaming in 2005 and said it would allow two casino resorts to be built. Genting was awarded rights to build and operate the Sentosa casino, while Las Vegas Sands was selected for the Marina Bay Sands resort in central Singapore.

In this situation the government awarded two individual 30-year operating concessions. The demographics and proximity of Singapore to significant population basis in Asia allowed for significant upfront fees. At least 5 investment groups, most of which included the largest and most established names in global gaming industry, were vying not only to pay the concession fees but pledging substantial development projects in order to win the opportunity to compete in the market.

Singapore's RFP outlined a small number of technical requirements relating to the possible sites, but presented only the following in terms of an investment guideline for one of the opportunities:

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

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

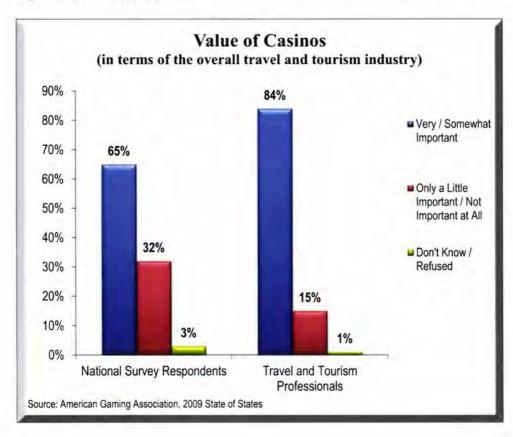
#### Other Considerations

Other considerations pertaining to prospective casino gaming in Bermuda include the ownership and operating structure of casinos. There are various models in place around the world ranging from private sector owner-operator models (most U.S. and Caribbean jurisdictions) to government owned with private operators (Ontario, Canada model) and even to government owned and operated (Manitoba and Quebec, Canada). In our opinion, based upon a variety of factors including our work around the world in numerous casino jurisdictions, we recommend that an "Owner-Operator" model works best for developing a sustainable long-term industry for a number of reasons:

- All financial, management and operating liabilities rest with the private license holders. These entities employ professional and experienced personnel who are responsible for operating & managing the facilities.
- The responsibility for raising the necessary capital rests with the private sector, which takes the risk of the devolvement, payback, returns, etc. (In Ontario, Canada there are

- examples of government owned facilities that are operated by the private sector whereby the private sector operator has assumed the development risks).
- The Owner-Operator model has proven to be the most efficient approach. Often the private sector can leverage their existing operations, support personnel, management team and balance sheet. The private sector also has the knowledge and experience and in many cases a database of existing gamblers and travelers (if they are a casino or lodging company) that they can use to cross-market. The private sector is motivated to build competitive facilities in order to effectively compete in the marketplace.
- There is no inherent conflict of interest when it comes to regulation and operation as
  is the case in a government owned enterprise. Governments should be the entities that
  regulate and monitor the industry; by also being an owner-operator, conflicts of
  interest, or the perception thereof, are inherent.

The casino industry has proven to be a catalyst for tourism development in other jurisdictions, the chart below shows just how important U.S. adults and travel and tourism professionals feel that the casino industry has become to the overall tourism market in the U.S. Approximately 65% of Americans feel that casinos are a very or somewhat important aspect of tourism industry. Among Travel and Tourism Professionals, this number jumps to approximately 84% revealing the strong importance of gaming in overall leisure and travel.



Additionally, all respondents were asked whether they agreed with the following statement: "Casino destinations attract tourists, and many of these people also visit other major sites in the surrounding areas, thereby helping the overall economy in the region." Interestingly, approximately 76% of National Survey Respondents and Travel and Tourism Professionals, Very Much Agree / Somewhat Agree with that statement.

#### **Ambient Machines**

The Innovation Group was asked to provide insight into the market potential for ambient machines to induce tourism. Ambient machines, such as those widely available in bars and restaurants, were available in Bermuda up until 2005, when the Prohibition of Gaming Machines Act of 2001 (amended in 2004) took effect. Estimates of the number of machines and their performance vary widely, and are potentially speculative, and were thus not included in this report. Furthermore, ambiguity surrounding the number of machines made it difficult to generate an estimate of their performance.

Ambient machines do operate in markets where casino gaming is available, most notably West Virginia and Louisiana in the US, and on a slightly larger scale, very successfully in social clubs in, Australia.

Although no research has been completed in West Virginia, The Innovation Group has conducted interviews of some operators and understands that no broad tourism marketing effort exists that features ambient machines. Moreover, in terms of a substantial mass capable of attracting tourism independent of advertising, none of the operators we've met with over time have mentioned that tourists are visiting the region in order to play the machines available in bars and taverns. It should be noted, however, there is some incidental play among tourists that visit the bars or taverns.

# Economic Impacts

We selected three different scenarios for further analysis. The selection of these particular scenarios was done in order to provide a representative sample of the three basic concepts for casino development. The first concept is one of a centrally located casino in Hamilton (as in Scenario #1), the second concept analyzes three casinos serving the central, eastern and western portion of the island thereby serving visitor and local populations in these areas (as in Scenario #2), and finally a concept which allows the development of casinos at major hotels throughout the island, (Scenario #4). The remaining scenarios in the casino revenue analysis aspect of our work are basically combinations or hybrids of the above three concepts.

- Scenario 1 which includes a single stand-alone casino in Hamilton.
- Scenario 2 which includes stand-alone casinos in Hamilton, the Dockyard and St. George.
- Scenarios 4 which includes casinos only at major hotels which are defined as including those facilities with over 100 rooms and includes Elbow Beach, Fairmont Southampton, Fairmont Hamilton, Grotto Bay, Newstead Belmont, Tucker Point and the proposed Hyatt.

In order to calculate the economic impact of casino spending, The Innovation Group needed to estimate various operating expenses for casino operations. Consequently, The Innovation Group developed pro forma operating data including gaming revenues and anticipated operating expenses for certain of the potential casino development scenarios. This provided the necessary economic inputs to allow for an estimation of economic impacts deriving from the introduction of gaming.

Pro Forma Operating Statements were developed down to the Earnings before Interest, Taxes and Depreciation and Amortization ("EBITDA") line item. EBITDA is a common metric utilized in the gaming and resort industries for evaluating the potential viability of a project and the amount of leverage that can be applied to a project. The following is a summary of Operating Profit (pre-Gaming Tax) based on a range of revenues that would be generated by casino hotels in the market. It should be noted that this is **before** gaming taxes which are taken off of the top line gaming revenues.

**Resort Operational Comparisons** 

Gaming Revenue Expectations	\$45 million +	\$25 million +	\$10 million +	> \$10 million
Operating Profit - Pre Gaming Tax	\$22,500,000	\$10,000,000	\$3,500,000	\$2,000,000
Margin	50.0%	40.0%	35.0%	20.0%

The following details the results of the economic impact analysis.

In terms of annual economic impact, Scenario 4, the "Large Hotel" scenario, provided the greatest impact on income, employment, public sector revenues and balance of payments as shown in the tables below.

Total Economic Impact as a Result of Spending by Casinos and Induced Tourists (in 000 000's of \$)

	Scenario 1 Hamilton Casino	Scenario 2 Three Casino Scenario	Scenario 4 Large Hotels	
Income	manimon outline	THIO GUOING GOOMANG	La go Hotolo	
Direct	\$52	\$73	\$89	
Indirect	\$25	\$32	\$41	
Induced	\$26	\$36	\$44	
Total	\$103	\$140	\$175	
Public Sector Revenue				
Direct	\$13	\$18	\$23	
Indirect	\$4	\$5	\$6	
Induced	\$9	\$12	\$15	
Total	\$25	\$34	\$43	
Balance of Payments				
Exports - Total	\$107	\$145	\$182	
Imports - Direct & Indirect	\$16	\$21	\$28	
Imports - Induced	\$22	\$30	\$37	
Net Impact	\$69	\$94	\$117	

Total Employment Impacts as a Result of Casino Spending and Spending by
Induced Tourists

Induced Tourists					
	Scenario 1 Hamilton Casino	Scenario 2 Three Casino Scenario	Scenario 4 Large Hotels		
Direct	855	1,177	1,493		
Indirect	423	548	714		
Induced	449	614	768		
Total	1,727	2,339	2,975		

However in terms one time of construction impacts Scenario 2 provides the greatest impact in terms of employment, income and direct government revenue.

**Direct Government Revenue from Construction** 

Direct Government Revenue	Tariffs	Employment Tax	Total	
Scenario 1-Hamilton Casino	\$6,380,794	\$10,614,400	\$16,995,194	
Scenario 2-Three Casino Scenario	\$9,088,977	\$15,119,441	\$24,208,418	
Scenario 4 Large Hotels	\$4,511,206	\$7,504,356	\$12,015,562	

Total Economic Impact on Income and Employment From Construction

	Scenario 1 Hamilton Casino	Scenario 2 Three Casino Scenario	Scenario 4 Large Hotels	
Income		The state of the s	10 mg 1	
Direct	\$15,921,600	\$22,679,162	\$11,256,534	
Indirect	\$4,153,461	\$5,968,200	\$3,020,046	
Induced	\$6,922,435	\$9,549,121	\$4,941,893	
Total	\$26,997,496	\$38,196,483	\$19,218,472	
Employment				
Direct	230	328	163	
Indirect	60	86	44	
Induced	100	138	71	
Total	390	552	278	

One of the primary goals of the introduction of gaming to Bermuda is to induce greater visitation to the Island and consequently, by implication, to improve the economic conditions of the existing lodging industry which has been hit by falling occupancy rates and revenues. The following table presents the direct impacts on the hotel industry in terms of impact on occupancy rates and revenues.

# Impact of Gaming on Hotel Occupancy and Revenues

	Existing Demand	Existing Demand	Current Occupancy Rate	New Demand as a Result of Gaming	% increase in Room Demand	New Occupancy Without Additions to Supply	Occupancy Rate Assuming Tuckers Point and Hyatt Developments	Increase in Room Revenue as a Result of Gaming
Scenario 1	1 casino downtown Hamilton	597,531	59.84%	96,794	16.20%	69.50%	64.20%	\$31,108,479
Scenario 2	3 casinos- Hamilton, Dockyard, St. Georges	597,531	59.84%	114,713	19.20%	71.30%	65.80%	\$36,867,333
Scenario 3	3 casinos plus casinos at major hotels	597,531	59.84%	177,087	29.60%	77.60%	71.60%	\$56,913,710
Scenario 4	casinos only at major hotels	597,531	59.84%	160,422	26.80%	75.90%	70.10%	\$51,557,549
Scenario 5	casinos at major hotels and all small hotels	597,531	59.84%	160,422	26.80%	75.90%	70.10%	\$51,557,549
Scenario 6	1 casino downtown Hamilton and at major hotels	597,531	59.84%	174,437	29.20%	77.30%	71.40%	\$56,061,765

While we have not developed full economic impacts for scenarios 3 (3 casinos plus major hotels), 5 (major and minor hotel casinos), and 6 (one casino in Hamilton and major hotels), the above information provides a good surrogate for economic impact estimation for these scenarios. It should be noted that both scenarios 3 and 6 provide greater impact on hotel revenues and thus would be expected to have a greater economic impact than scenarios 1, 2 and 4. It would however be our expectation, based on the market size and the economics of casino construction, and the requirements of financing and operational costs, that the development of casinos at major hotels and indeed smaller hotels (included in Scenarios 3, 4, 5, and 6) would in the end result in many of the properties choosing not to go forward with casino development with the result that the economic impacts would be reduced. It is our belief that Scenario 6 offers an attractive option in that Bermuda would be guaranteed a major casino in Hamilton and would at the same time also benefit from at least some of the major hotels in this scenario moving forward with casino development. This would result in significantly greater economic impacts than under scenarios 1 or 2 but somewhat less than that shown here for Scenario 4 (assuming all major hotels would develop a casino in that scenario).

The following table provides a complete summary of the economic impacts of the three scenarios analyzed.

**Summary of Economic Impacts** 

	Scenario 1	Scenario 2	Scenario 4  Casinos Only at  Major Hotels	
From Operations and Induced Tourists (Annually recurring impacts)	1 Casino Downtown Hamilton	3 casinos- Hamilton, Dockyard, St. Georges		
<u>Income</u>				
Direct	\$52	\$73	\$89	
Indirect and Induced	\$51	\$68	\$85	
Total	\$103	\$140	\$175	
Public Sector Revenue				
Direct	\$13	\$18	\$23	
Indirect and Induced	\$13	\$17	\$21	
Total	\$25	\$34	\$43	
Balance of Payments				
Exports	\$107	\$145	\$182	
Imports	\$38	\$51	\$65	
Net Impact	\$69	\$94	\$117	
Employment				
Direct	855	1177	1493	
Indirect and Induced	872	1162	1482	
Total	1,727	2,339	2,975	
From Construction (one year impacts)				
Income				
Direct	\$16	\$23	\$11	
Indirect and Induced	\$11	\$16	\$8	
Total	\$27	\$38	\$19	
Employment(				
Direct	230	328	163	
Indirect and Induced	160	224	115	
Total	390	552	278	

In addition to the impact on existing properties, the advent of gaming and the added attractiveness it brings to hotel developers considering developing property on the island cannot be ignored. As has occurred in other jurisdictions, it is likely that several of the planned hotel projects currently in hiatus would move forward as a direct consequence of the advent of gaming in Bermuda. The presence of gaming offers the prospect of an additional profit center that developers can utilize in raising financing and providing adequate returns to equity holders; hence gaming has been instrumental in other jurisdictions in helping to jumpstart new projects. However, it is very difficult to quantify the economic impacts of these proposed projects in Bermuda without knowledge of the specific economics of each project.

Overall we have estimated that the costs to Bermuda of introducing gaming would total \$4.6 million annually, these would be offset by taxes and a special levy to pay for additional police services and programs to mitigate effects of problem gambling. It is therefore concluded that the positive of introducing gaming to Bermuda outweigh the negatives in terms of economic impact by a significant margin.

### Likely Range of Capital Investment

Based on the EBITDA margins as projected in this analysis and assuming an 18% gaming tax and problem gambling levy the following provides a rough range for the likely level of capital investment under each scenario. This is based on our experience of the type of return investors would be seeking in this sector.

Range of Likely Capital Investment				
	Scenario 1	Scenario 2	Scenario 4	
Low	\$105	\$100	\$95	
High	\$160	\$150	\$140	

# Social Impact Issues & Considerations

Any analysis of the potential impacts of bringing some form of legalized gaming to Bermuda needs to take into account the potential social costs associated with the industry as well as the cost to monitor and regulate the industry and provide the necessary support services.

Other jurisdictions have faced similar issues. The Australia Government Productivity Commission, for example, explained: "The challenge for all governments ... is to find a response which balances the undoubted right of individuals to gamble if they wish with the ongoing responsibility of governments for overall community welfare.

Utilizing data and research from numerous other jurisdictions and both proprietary and published third party research, The Innovation Group evaluated the various social implications and estimated certain costs that might incur should legalized gaming be introduced.

The data points out that many of the social impacts concentrate on the costs to a gaming area brought about by problematic gamblers. An Australia Productivity Commission report on gaming, for example, concluded "the principal costs for society related to gambling (costs that are not offset by benefits elsewhere) result from *problem* gambling." The Solicitor General of the United States came to a similar conclusion: "Many of the associated social costs to casino gambling stem from 'pathological' or 'compulsive' gambling by approximately 3 million Americans."

<sup>&</sup>lt;sup>1</sup> Australia Productivity Commission.

Attempts to quantify these costs result in a wide range of estimates. Without carefully defined—and widely accepted—measurements of the social costs of problematic gambling, debate will likely continue.

The following areas were reviewed and examined by The Innovation Group as part of our study:

- · Concerns Regarding Crime
- Financial Crimes of Burglary, Theft, Embezzlement and Robbery
- Loan Sharking
- Crimes Around a Casino Environment
- Prostitution
- Social Impact Issues
- Bankruptcy
- Suicide
- · Impacts on the Family
- Child Abuse and Neglect
- Homelessness
- Substance Abuse and Comorbidity
- · Domestic Violence
- Divorce

#### Social Impact Initiatives

After examining the social impact issues traditionally debated when a jurisdiction brings a new type of gaming into an area, it is imperative that initiatives be considered to mitigate any negative circumstances as well as to maximize the positive experience for the jurisdiction and its citizens.

Through the course of our study we identified several initiatives that could be a benefit to Bermuda and its residents in the new era of casino-type gaming. Each initiative includes a variety of recommendations from which the Bermuda Government and the Bermuda Hotel Association may make choices and prioritize the order in which problems should be addressed.

Initiatives are recommended in the following areas:

- Workplace
- · Family impact
- Neighborhood
- · Faith community
- Youth
- Older adults
- Public safety and crime prevention
- Public awareness.

The recommended actions are intended to be cost-effective through development by Bermudan staff and consultants. These initiatives can be furthered strengthened by public input and policy development through the normal government policy channels.

There are certain steps that a local community can take to ensure that the advent of a casino benefits local merchants and businesses. A casino and its environs should be carefully master-planned to ensure that casino patrons have access to quality retail and F&B developments in the immediate area of the casino. Such a master plan should carefully look at access routes, merchant mix, visibility and the attractiveness of the area. By working closely with the casino developer local communities can not only extract the maximum benefit from casino visitation but can also enhance the success of the casinos. For example any alternative that considers a casino in downtown Hamilton has the ability to lend itself to inclusion in a master plan that would help ensure that surrounding business benefit by close integration with the casino complex and careful physical planning. In such a situation the casino could act in a fashion similar to a department store anchor in a shopping mall development.

Bermuda can set an example on how the addition of casino gaming can both enhance the recreational opportunities of casino gaming without disrupting the lives of individual citizens nor mar the positive image of Bermuda.

#### Social Costs

Even if the appropriate initiatives are implemented, there are likely to be some additional social and related cost to Bermuda if gaming were to be enacted. However, based upon our analysis and examination of the issues, The Innovation Group concludes that the additional identified social costs both in terms of services (law enforcement, fire protection and health/social costs) are more than mitigated by the tax revenues, job creation and capital investment that is likely to occur with the advent of casino gaming.

Based on the estimated incidence of problem gambling, the additional staff required will include certified gambling counselors, Psychologist (experienced with addressing pathological gamblers), additional addiction counselors and a social worker. The estimated costs of these positions are shown in the table below.

**Estimated Staffing costs to Mitigate Problem Gambling** 

Staffing	Approximate Salary
Psychologist	\$115,000
Certified Gambling Counselors (3 @ \$75,000 each)	\$225,000
Addiction Counselors (2 @ \$70,000 each)	\$140,000
Social Worker	\$85,000
Total	\$565,000

Source: Preston Swan, Acting Director of Quality and Risk Management on the Bermuda Hospitals Board

In addition, an increase in building costs which could range from \$200,000 to \$400,000 as additional space will be needed for staff, equipment and miscellaneous items.

The conclusion is generally that the revenues provided by commercial casinos cover the costs for problem gambling services and do not burden local governments. Given the preliminary figures estimated to mitigate potential issues due to the addition of casino gaming in Bermuda, it appears that the same would hold true in Bermuda.

#### Gambling Help Line Costs

Most US states contract the Louisiana Association on Compulsive Gambling (LACG) to man a hotline for problem gamblers seeking help. Discussion with the LACG suggests that they would be happy to discuss contracting with Bermuda to answer their helpline. It is to be expected that the cost would be substantially less than those for other jurisdictions given the population differentials although this would be offset by possible increased call charges. However, in the absence of a defined contract an estimate of \$50,000 annually would not seem unreasonable.

#### Traffic, Fire & Police Costs

As part of the Social Impact Analysis, The Innovation Group examined the potential for other costs to the Government of Bermuda. These included the following:

#### Traffic

In many instances, we found that issues dealt mainly with site-specific congestion. However, in most instances, individual casinos contributed to road construction projects to improve access to the casino. In Bermuda, where tourists are not allowed to rent cars and vehicle ownership is restricted, we anticipate that any traffic related issues will be site specific and would have to be planned for when the actual development sites are known. Therefore we recommend that a comprehensive transportation plan must be contemplated for specific sites. In addition, transportation issues need to be factored into the site selection process.

#### **Fire Department Costs**

No increases in fire or emergency medical services are foreseen of a significant nature.

#### **Police Costs**

The Bermuda Police Service would likely need to purchase a new squad car approximately every three years. It is also estimated that Bermuda would need to hire additional staff for 24 hour policing assuming a single major casino in Downtown Hamilton. The total policing costs annually are estimated at \$1.02 million.

#### Total Costs Associated with the Introduction of Gaming to Bermuda

The following table presents the sum total of costs associated with the introduction of gaming to Bermuda on an annual basis estimated at \$4.6 million of which 2.2 million is related to the regulation of gaming and the remainder, \$2.4 million associated with mitigation issues.

Sum of Other Costs Associated with Gaming

	Employment Expenses		Total Salaries and Benefits	Total	
Regulatory	23	\$466,050	\$1,702,400	\$2,168,450	
Policing Costs		\$54,000 for Squad car every			
		three years	\$1,000,000	\$1,020,000	
Mitigation Programs	2	\$360,000	\$140,000	\$500,000	
Problem Gambling Treatment Costs		\$200,000-\$400,000-Additional	\$565,000		
•	7	office space		\$865,000	
Problem Gambling Hotline		\$50,000 annually		\$50,000	
Total	32	\$1,196,050	\$3,407,400	\$4,603,450	

These cost are typically offset by a licensing fees, gaming taxes and a special levy for problem gambling issues, all paid by the casino operators.

# DISCLAIMER

Certain information included in this report contains forward-looking estimates, projections and/or statements. The Innovation Group has based these projections, estimates and/or statements on our current expectations about future events. These forward-looking items include statements that reflect our existing beliefs and knowledge regarding the operating environment, existing trends, existing plans, objectives, goals, expectations, anticipations, results of operations, future performance and business plans.

Further, statements that include the words "may," "could," "should," "would," "believe," "expect," "anticipate," "estimate," "intend," "plan," "project," or other words or expressions of similar meaning have been utilized. These statements reflect our judgment on the date they are made and we undertake no duty to update such statements in the future.

Although we believe that the expectations in these reports are reasonable, any or all of the estimates or projections in this report may prove to be incorrect. To the extent possible, we have attempted to verify and confirm estimates and assumptions used in this analysis. However, some assumptions inevitably will not materialize as a result of inaccurate assumptions or as a consequence of known or unknown risks and uncertainties and unanticipated events and circumstances, which may occur. Consequently, actual results achieved during the period covered by our analysis will vary from our estimates and the variations may be material. As such, The Innovation Group accepts no liability in relation to the estimates provided herein.

# **Section II: Lottery Assessment**

# INTRODUCTION

As part of The Innovation Group's overall engagement with regard to potential gaming opportunities for Bermuda, we were requested to evaluate the potential for a lottery in Bermuda. In this portion of the engagement, it is recognized that a lottery does not typically generate tourism. However, lottery revenue can be used to further support efforts of the government's tourism department.

The earliest known lotteries existed in ancient Greece. In ancient Rome, Caesar used lotteries to raise money for public works projects. Other lotteries existed through medieval times in Belgium, Holland, Germany, and the United Kingdom. Many of these lotteries were authorized by the government and licensed to private operators. Others were run by charities or directly by national governments. Many of these lotteries were shut down during the 1900s due to major abuses.

The New World instituted lotteries for public works projects including roadways, schools, universities, and other public facilities. Widespread popularity and abuses, including the infamous abuse of the privately-owned Louisiana Sweepstakes, led to the demise of lotteries in North America in the 1800s. In 1963 these bans were overcome when New Hampshire passed the first modern state lottery in the United States and the first lottery of the 20<sup>th</sup> century. Now 42 states and the District of Columbia operate lotteries as well as countries from Albania to Zimbabwe.

Please note that specific information in this report is subject to confidentiality agreements agreed to by the Government of Bermuda, GTECH, and The Innovation Group. This specific information, which is *italicized* in this report, is specifically for the use of these entities and is not for public distribution.

# Lottery Structure

Today more than 200 lotteries are in operation on six continents. In 2007, the most recent full year for which comparable data is available, total lottery sales totaled USD\$224.3 billion with an additional \$10 billion in video lottery terminal revenue. Video lottery terminals are very similar to slot machines but meet lottery regulations in the United States and Canada. Traditional lottery products include draw-type games such as lottery and Pick-3, instants such as scratch tickets and pull tabs, sports wagers, and video lottery terminals.

Global Lottery Sales, 2007

Region	USD\$ Billion		
Africa	\$0.55		
Australasia	\$4.30		
Asian & Middle East	\$39.60		
Europe	\$108.90		
Central & South America	\$7.70		
North America	\$63.20		
VLT	\$10.05		
Total	\$234.30		

Source: La Fleur's 2008 World Lottery Almanac

Lotteries have evolved from simple drawings to video lottery terminals. The objective of this section is to provide details on the structure and operations of lotteries. Technically, a lottery is defined as a drawing in which prizes are distributed to winners among persons buying a chance. From that definition, many types of games have been developed.

The analysis of video lottery terminals is not undertaken in this report, as casino games are a separate part of The Innovation Group's engagement with the Government of Bermuda and the Bermuda Hotel Association.

# LOTTERY DYNAMICS

As a form of gaming, lotteries are distinguished in that they are most frequently run by governing entities and take a pari-mutuel form. The dynamics are discussed herein to clarify many of the misnomers about the lottery offering.

# Lottery Games

Lotto is currently one of the most visible forms of lottery gaming. Lotto games are typically drawn once or twice weekly and are designed to yield a large jackpot with relatively long odds such that one or a handful of winners tend to share a prize that is large relative to other lottery games. Examples of lottos include Mega Millions and Powerball in the United States, EuroMillions in Europe, and the National Lottery in the United Kingdom. Many lotto games in the United States are online, meaning they utilize sophisticated, secure computer networks to record wagers quickly and securely. In contrast, passive lottos are still used in Europe and use manual records to track play and determine winners. Lotto games tend to pay out large prizes over 20 years, although many offer an immediate pay out option.

Multi-jurisdictional lottos have helped small jurisdictions create a higher level of play and generate interest in larger jackpots. This may be one strategy that would enhance Bermuda's lottery prospects. Canadian and Australian provinces each have multijurisdictional games. In the United States, the Powerball, Tri-State Megabucks, and Mega Millions lottos all run across multiple states. The Viking Lotto is played across five Scandinavian countries. Most relevant to Bermuda, however, may be the Leeward Islands Lottery Holding Company ("LILHCO"). LILHCO's lottery offering extends across eight jurisdictions, Anguilla, Antigua and Barbuda, St. Kitts and Nevis, St. Maarten, Barbados, U.S. Virgin Islands, Turks and Caicos, and Bermuda. In Bermuda, Triple Crown, operated by Wendal Brown, is a super agent of the lottery. This allows Triple Crown to sell lottery tickets and The Innovation Group was told that this ability was granted under Triple Crown's license granted under the Betting Act of 1975. *In* 2008, LILHCO sales were \$63.0 million, of which \$295,237 was generated in Bermuda.

Scratch-off instant tickets were introduced in Massachusetts in 1974 and have become a popular form of lottery game. The ticket features a latex covering that is scratched off in order to find out if the ticket is a winner. The tickets have the advantage of providing a player with instant notification of the outcome of the game. With regular players, operators have had more success by offering a variety of games and not offering all games at all times. Rotating games and creating new games helps to retain customers. Scratch-off tickets are offered in lotteries in North and South America, Europe, Asia, Africa, and Australia.

Pull tab (or break-open) tickets are similar to scratch-off tickets in that they provide instant notification of the game's outcome, which is revealed by a paper flap. Historically offered as part of a charitable game offering, lotteries in North America have offered pull tabs since the 1980s. Payout rates, the amount of every dollar wagered that is returned in prizes, tend to be relatively large for lottery products. However, with

payout rates at or even above 70%, prizes tend to be modest with a large number of winning tickets.

Pick-3 and Pick-4 number games are daily games where the player picks a 3 or 4-digit combination hoping that an identical combination is randomly selected as the winner later that day. Prizes in these lotteries are typically capped between \$500 and \$2,500 in the United States, with other jurisdictions having prizes assumed to be commensurate with levels of play.

Keno started being included in the product mix in the mid-1980's. Originally, these products featured payout structures similar to those used in Nevada casinos and featured drawings once or twice a week. In the late 1980's the Lotteries Commission of South Australia pioneered the world's first fast draw casino, which was online and featured drawings every five minutes. Fast draw keno is a major source of growth in North America and is currently offered in 11 jurisdictions.

The two final forms of lottery are sports pools and video lottery terminals. Sports pools are most popular in Europe, where they are commonly referred to as toto, and in Canada. The big appeal of sports pools is that the element of skill and sports may appeal to some players that may not purchase traditional lottery products.

Video lottery terminals, or VLTs, are an extension of lottery products created to meet legislative requirements in the United States and Canada. VLTs are electronic games of chance and are basically, from a visual and practical operating perspective, traditional slot machines. VLTs have been around since 1982 when GTECH introduced the lottery industries first electronic dedicated lottery terminal. The definition of a VLT has expanded over the past decade out of the need to circumvent existing state and provincial constitutions and manage the machines through a lottery division. State and provincial lottery agencies, through centralized computers, monitor and audit each machine, which is critical from a legal perspective.

The creation of these various lottery games has been driven by operators' desire to broaden their customer base. For example, lotto games appeal to different players than those who chose to play instant tickets. According to interviews with former lottery managers, lottos attract two types of buyers. A core group will buy tickets for every drawing, while some occasional players purchase tickets for large drawings. Regardless of the frequency of purchase, these players enjoy dreaming about what they would do if they were to win a large jackpot. In comparison, instant ticket customers are more interested in knowing the immediate outcome, forgoing the potential for a huge jackpot. Pull-tab customers may enjoy the same immediacy, but have a lower tolerance for risk.

# Participation

Lottery participation rates in the United States are higher than any other form of gaming. In fact, the following table shows that in a 2008 public poll, nearly half of all adult Americans had played the lottery in the past year. Casino gambling came in second with

a 29% participation rate and poker had attracted 13% of the adult population, with other forms attracting less than 10%.



In Canada it is estimated that more than 60% of adults buy lottery tickets regularly and about 90% have played at some point. This is believed to be due to the fact that the lottery existed for some time before casino gaming became an option.

# Player Profile

Several studies, including those conducted by the National Gambling Impact Study Commission ("NGISC"), the Colorado Lottery, and the Texas Lottery have provided research on the demographics of lottery players in the United States. These studies indicate that lottery players largely mirror the public at large in terms of sex, age, and income levels. However, The NGISC commissioned a study conducted at the University of Chicago's National Opinion Research Council that showed play is skewed towards men, African Americans, high school dropouts, and those with average annual household incomes ("AAHI") lower than \$10,000. In fact, those with AAHI lower than \$10,000 reported playing \$597 annually compared to \$382 for those with AAHI between \$25,000 and \$49,999 and \$225 for those with AAHI between \$50,000 and \$99,999. For this reason it has been argued that lotteries are a regressive tax as they appeal to players with lower incomes.

# Management Structure

Traditionally lotteries have been run by government agencies. Under these circumstances, lotteries were subject to political forces. Governments originally outsourced specific technical elements to private firms, and over time other parts of the operations were outsourced. As governments sought efficiencies and enhanced returns, and outsourcing grew, the state-run model became less favorably viewed.

The licensing of lottery operations by quasi-public agencies and private entrepreneurs started in the 1990s. These organizations feature less political control and intervention and a management structure that favors selling products to consumers while aligning goals of profitability and government causes. This licensing phenomenon is most apparent in the United States, where some states, like Texas, Florida, and Illinois continue to directly operate their lotteries, while Georgia, Kentucky, and Louisiana are among the more progressive models.

Many states have recently contemplated privatization as a way to raise funds, with California, Illinois, Indiana, and New Jersey being the most serious about the opportunity. Indiana and New Jersey asked the U.S. Department of Justice for an opinion regarding the legality of privatization, and the ruling essentially put significant limits on how far states could go in terms of outsourcing and, in the process, slowed down and even stopped several states' discussions on the topic.

# Sales Channels

Lottery tickets are typically sold through a network of retailers. In the case of an online lottery, which make up the majority of new lotteries, retailers operate a terminal for online sales and also hold an inventory of scratch tickets and/or pull tabs. In many jurisdictions, lottery sales are made by third parties that include operators of convenience stores, refueling stations, and liquor stores. In exchange for their services, retailers earn an average commission of 6%. Lottery commissions can be a major source of income for retailers, and helping small retail operations is positive but must be balanced with the costs associated with installing and maintaining terminals and the associated costs. In jurisdictions within the United States, lottery terminals number one for every 1,200 people.

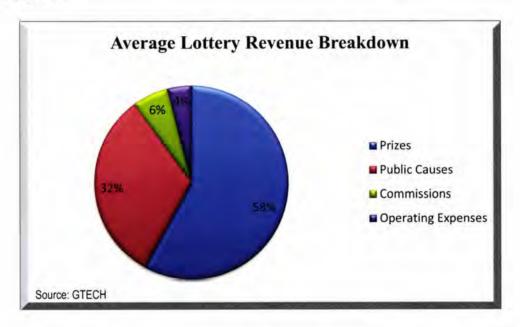
# Lottery Revenue Distribution

According to GTECH, a subsidiary of Lottomatica and service provider to the lottery industry, on average 58% of lottery winnings are distributed in prizes. This rate is blended, and lotto products tend to range from a 45-50% payout, scratch tickets and instants historically offer approximately 60% (recent trend upwards), and keno games tend to be higher. The public is moderately sensitive to the payout ratio. There are two examples GTECH uses to make this example. The first is Rhode Island, where in 1997 a 55% payout ratio was generating approximately \$450,000 in weekly play for the Club Keno game. The payout ratio was subsequently changed to 65% and in 1-2 years time weekly play increased to \$1.7 million. In this case, the loss due to payout ratios was overcome by the gain in weekly play.

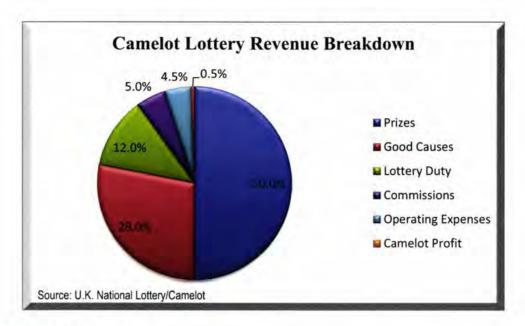
The example of Texas shows how dropping the payout ratio can hurt performance. In Texas, the lottery had been demonstrating dramatic growth and had revenue of approximately \$2 billion annually. The government dropped the payout ratio and saw an immediate decline in play. Within two months the historical payout ratio was reinstated, however, it took 7-8 years to reach its historical revenue levels.

Other industry experts, including former lottery managers, point out that these examples are extreme. Dramatic changes as were made and even politicized in these cases are outliers. Ultimately, only regular players of lottery games are going to be sensitive enough to note changes in payout ratios.

The following table shows the average lottery revenue breakdown including the prize payout detailed above. Next to prize payouts, the distribution for public causes is the next largest distribution. Approximately 32% is paid out either directly to the government's general funds, or in many cases, to specific causes. Specific causes can be part of the political process that enables lottery legislation. In Georgia, for example, any student who achieves a B average or greater in high school can attend college for four years at the state's expense. Commissions, at 6%, and operating expenses, at 4%, make up the balance.



The next table shows the revenue breakdown for Camelot, which operates the National Lottery on behalf of the United Kingdom. As an example, the National Lottery dedicates 50% of its revenue to prizes, 8% below the averages calculated by GTECH. The combined 28% for Good Causes and 12% Lottery Duty are 8% above the average 32% for public causes. This tradeoff may be possible as the size of the lottery itself allows a lower percentage to be dedicated to prizes while maintaining a prize significant enough to attract play.



# Lottery Benefits

The motivation behind enabling legislation is frequently political and centers around a governments desire to raise funds in an effort to improve the quality of life for its citizens. Popular programs that receive lottery funds include aiding the elderly and disabled, subsidizing education programs, supporting cultural institutions, and building infrastructure. This allocation of proceeds serves two purposes. The first is to help attract the political support to legalize a lottery. The second is that it helps customers rationalize their losses, noting that they supported a good cause. In the case of Bermuda, it has been specifically noted that revenue could be used to subsidize tourism budgets with the goal of driving increases in tourism. Broader benefits include job creation, the reduction of illegal gambling activity, and upgrades to information technology infrastructure.

#### Tourism

In none of the upcoming case studies provided, nor any other jurisdiction that The Innovation Group is aware of , was an increase in tourism observed that coincided and was correlated with the advent of a lottery offering. In fact, the only observed incidence of increased sales was at border retail locations in the United States attributable to high lotto jackpots. While these border locations allow other states' residents to easily purchase lottery tickets from the neighboring state, Bermuda's location makes the possibility of such induced sales extremely unlikely.

# LOTTERY PERFORMANCE

Global lottery sales were \$224.3 billion in 2007 (with the exception of video lottery terminal sales), however, specific lotteries will serve as the foundation of our analysis. The following case studies are provided for that purpose.

# United Kingdom: National Lottery

The National Lottery is operated on the United Kingdom's behalf through a licensing agreement. The operator, Camelot, claims that its expense ratio of 4.5% makes it the most cost-efficient lottery in Europe. Distribution of products includes subscription play, Sky Active (television), via text message, online, and at a network of retailers. Products include lottos, numbers (daily number drawings), and instant scratch tickets.

The National Lottery generated revenue of \$9.6 billion in 2007, 0.39% of GDP. The majority of these revenues are earned from instant lottery tickets. Although tickets are available online, more than 96% of the United Kingdom's population live or work within two miles of a lottery terminal. With a 70% rate of participation among adults, win per adult is approximately USD\$190.

National Lottery: 200	07
Country	United Kingdom
Total Population (M)	60.9
Age Requirement	16 years
Estimated Addressable Market (millions of people)	50.9
Revenue (USD\$M)	\$9,640.8
GDP (USD\$M)	\$2,492,464.6
Outlets	26,200
Revenue/Adult	\$189.59
Revenue/GDP	0.39%
Revenue/Outlet	\$367,969
Penetration Rate	70%
Games	Lotto, Numbers, Instant
Payout Ratio	50%

Source: The Innovation Group, La Fleur's 2008 World Lottery Almanac, Camelot, U.K. Statistics Authority

# Trinidad: National Lotteries

Trinidad operates National Lotteries, but unfortunately does not publish information on its performance regularly or in detail. In 2002, the National Lotteries generated \$137.2 million in revenue, 1.46% of GDP. This was approximately \$160 revenue per potential player. An estimated 72% of those eligible chose to play a lottery game, and numbers generated the majority of revenue, although lotto, instants, and keno were all significant contributors.

#### National Lotteries: 2002

Country	Trinidad
Total Population (M)	1.1
Age Requirement	18 years
Estimated Addressable Market (millions of people)	0.9
Revenue (USD\$M)	\$137.2
GDP (USD\$M)	\$9,374.3
Outlets	618
Revenue/Adult	\$159.85
Revenue/GDP	1.46%
Revenue/Outlet	\$222,006
Penetration Rate	72%
	Lotto, Numbers,
Games	Keno, Draw, Instant
Payout Ratio	50%

Source: The Innovation Group, La Fleur's 2008 World Lottery Almanac, Trinidad National Lotteries Control Board, Trinidad and Tobago Central Statistics Office, GTECH

#### Barbados

The following table breaks out LILHCO's performance in Barbados. Barbados, with a relatively small and affluent population, is potentially the most similar to Bermuda in terms of a single case study. The island is home to approximately 250,000 people, with over 180,000 adults, 92% of whom play some sort of lottery product over the course of a year. This leads to relatively high performance among the comparable markets, with \$245 win per person leading to win of 1.18% of GDP.

#### LILHCO: 2008

LILICU: 2006	
Country	Barbados
Total Population	250,010
Age Requirement	18 years
Estimated Addressable Market (millions of people)	180,500
Revenue (USD\$M)	\$44.3
GDP (USD\$M, 2007 Estimate)	\$3,739.0
Outlets	214
Revenue/Adult	\$245.43
Revenue/GDP	1.18%
Revenue/Outlet	\$207,009
Penetration Rate	92.3%
	Lotto, Numbers,
Games	Instant, Keno
Payout Ratio	61.6%

Source: The Innovation Group, La Fleur's 2008 World Lottery Almanac, Barbados Statistical Service, CIA World Factbook, GTECH

# New York

The State of New York operates the New York Lottery, which grossed \$6.7 billion in revenue in 2007, 0.61% of the state's gross domestic product. With an age requirement of 18 years to play, in 2007 it was calculated that revenue per capita was \$379. More than half of revenue was generated by instant tickets, which offer a 66% payout. Another \$1 billion in lotto sales was induced by a 52% payout rate, while \$500 million in lotto

sales came from Mega Millions, a multi-jurisdictional game that at times drives high jack pots.

New York Lottery: 2007

State	New York
Total Population (M)	19.3
Age Requirement	18 years
Estimated Addressable Market (millions of people)	17.6
Revenue (USD\$M)	\$6,687.1
GDP (USD\$M)	\$1,103,024.0
Outlets	15,895
Revenue/Adult	\$378.92
Revenue/GDP	0.61%
Revenue/Outlet	\$420,706
Penetration Rate	61%
	Lotto, Numbers, Keno,
Games	Instant
Payout Ratio	60%

Source: The Innovation Group, La Fleur's 2008 World Lottery Almanac, New York Lottery, New York State Data Center, GTECH

### Massachusetts

The Commonwealth of Massachusetts operates one of the most successful lotteries in the United States. Lottery revenues of \$4.6 billion represent play of \$913 per eligible adult within the jurisdiction, although it is likely that significant sales are attributable to residents of neighboring states. Lottery revenue was 1.3% of the Commonwealth's GDP, with about 60% of sales attributable to instant tickets. In fact, Massachusetts introduced the world's first scratch-off latex instant tickets in 1974.

Massachusetts State Lottery: 2007

State	Massachusetts
Total Population (M)	6.4
Age Requirement	18 years
Estimated Addressable Market (millions of people)	5.0
Revenue (USD\$M)	\$4,579.8
GDP (USD\$M)	\$351,514.0
Outlets	8,196
Revenue/Adult	\$912.88
Revenue/GDP	1.30%
Revenue/Outlet	\$558,787
Penetration Rate	82%
	Lotto, Numbers, Keno,
Games	Instant
Payout Ratio	73%

Source: The Innovation Group, La Fleur's 2008 World Lottery Almanac, Massachusetts State Lottery, U.S. Bureau of Economic Analysis, Commonwealth of Massachusetts, GTECH

### Texas

The Texas lottery grossed \$3.8 billion dollars in 2007, 0.33% of the state's GDP that year. The state completed a demographic study in 2007 and found that 38% of all adults in the state had played lottery products within the past year. Like many other states, instant tickets comprise the majority of revenue, making up nearly 74% of revenue. The average play per adult in the state was \$196.

**Texas State Lottery: 2007** 

State	Texas
Total Population (M)	23.9
Age Requirement	18 years
Estimated Addressable Market (millions of people)	19.2
Revenue (USD\$M)	\$3,776.3
GDP (USD\$M)	\$1,141,965.0
Outlets	16,200
Revenue/Adult	\$196.28
Revenue/GDP	0.33%
Revenue/Outlet	\$233,107
Penetration Rate	38%
	Lotto, Numbers,
Games	Instant
Payout Ratio	61%

Source: The Innovation Group, La Fleur's 2008 World Lottery Almanac, Texas State Lottery, U.S. Bureau of Economic Analysis, State of Texas

# LOTTERY ANALYSIS

The potential for a lottery in Bermuda was estimated based on the previous examples. Lottery sales were estimated using three methodologies; i) based on a percentage of GDP, ii) based on a per capita basis, and finally iii) based on the percentage of adults captured and their average spend.

The Innovation Group did not assume that the lottery is able to sell tickets abroad, either electronically or through the mail. The assumption of tax-free winnings, combined with an online sales mechanism, could essentially qualify the lottery as online gaming, which is addressed in another part of our study. It is important to note that, it is possible that a mechanism exists to run a lottery and allow foreign residents to play tax free, and that this could potentially generate substantial revenues beyond those forecasted in this report. For example, a former manager of a Canadian lottery indicated that approximately 20 years ago tax-free Canadian lotteries were attracting approximately \$200 million in sales from the United States. Of course, many will note that cooperation between the two nations allowed citizens to easily cross at borders without passports, a convenience that has been largely curbed and will be further curbed in the future.

The following assumptions underlie these estimates:

- The lottery was assumed to commence operations on January 1, 2011;
- · Other forms of gaming are limited to the current legal offerings in Bermuda;
- Lottery products were assumed to include the lotto, number products, and instant tickets;
- Jackpots are developed either through cooperation with LILHCo or another multijurisdictional product;
- · Lottery winnings are tax free;
- · The lottery will be professionally run and managed; and
- The retail distribution network for lottery tickets will sufficiently minimize the
  effort required by a potential customer to access a purchase point.

Two considerations exist in the case of Bermuda and the application of the comparable markets. The first is the size of the population base. With an estimated population of approximately 60,000, the population of Bermuda is approximately one-quarter of Barbados', which is part of the much larger LILHCo offering. The next smallest jurisdiction, Trinidad, has a population of approximately 1.1 million people. These customer bases enable those lotteries and others to attract a high level of play and directly finance the substantial jackpots that are needed to attract some players. It is likely that the relatively high wealth in Bermuda will require meaningful jackpots to attract a high level of interest from the local population. This level of interest is likely to only be established through a multi-jurisdictional lottery, as is assumed.

The second challenge is the island's specific population base and its comparison to other populations. The Bermudian population is relatively well educated and, according to several surveys, may be skewed towards more complex and interactive games including

casino games. In our assumptions stated above, we have assumed that casino gaming will not be available beyond the current Crown and Anchor offering. It is possible that, given the demographics and psychographics of Bermuda, that a casino would be favored to a lottery. This is due to the higher income levels enjoyed by Bermudians and higher education levels that do not coincide with lottery demographics.

# Percentage of GDP Lottery Revenue Estimate

The following table shows the percentage of GDP analysis. The upper part of the range includes Trinidad and Massachusetts, which garner 1.46% and 1.30% of GDP, respectively. The United Kingdom, which has a stated goal of staying out of the top ten lotteries worldwide, and Texas, which has instituted some questionable operating decisions, form the low end of the range at 0.39% and 0.33%, respectively. New York sits in the middle at 0.61%, close to the average of 0.88% for the group.

Lottery Revenue/GDP Examples

	United Kingdom	Trinidad	Barbados	New York	Mass	Texas	Average
Lottery Revenue/GDP	0.39%	1.46%	1.18%	0.61%	1.30%	0.33%	0.88%

Source: The Innovation Group, La Fleur's 2008 World Lottery Almanac, Camelot, U.K. Statistics Authority, Trinidad National Lotteries Control Board, Trinidad and Tobago Central Statistics Office, New York Lottery, New York State Data Center, Massachusetts State Lottery, U.S. Bureau of Economic Analysis, Texas State Lottery, State of Texas, GTECH

The resulting lottery revenue estimate is shown in the following table. Based on an estimated GDP of \$5.9 billion, comparable to the 2007 performance, and the average ratio of GDP to lottery revenue of 0.88%, the projected revenue is \$51.5 million, as is shown in the following table:

#### **Lottery Revenue Estimate: 2011**

GDP (\$M)	\$5,855.0
Average ratio	0.88%
Estimated Lottery Revenue (\$M)	\$51.5

Source: The Innovation Group

# Per Capita Lottery Revenue Estimate

The following table shows the estimated revenue per person based on the qualified addressable market. The U.S. markets have a minimum age of 18 to play, while 16 is the minimum age in the United Kingdom. Massachusetts outperformed other states on this metric, generating \$913 for every resident of the Commonwealth. The other regions in the analysis range in win per capita from approximately \$160 for Trinidad to \$913 for Massachusetts.

Per Capita Lottery Revenue Examples

	United			New			
	Kingdom	Trinidad	Barbados	York	Mass	Texas	Average
Lottery Revenue/Capita	\$189.59	\$159.85	\$245.43	\$378.92	\$912.88	\$196.28	\$347.16

Source: The Innovation Group, La Fleur's 2008 World Lottery Almanac, Camelot, U.K. Statistics Authority, Trinidad National Lotteries Control Board, Trinidad and Tobago Central Statistics Office, New York Lottery, New York State Data Center, Massachusetts State Lottery, U.S. Bureau of Economic Analysis, Texas State Lottery, State of Texas, GTECH

The following table shows the projected population over the age of 20 and the average per capital revenue of \$347. The resulting estimated revenue of \$17.35 million is substantially lower than the previous estimate.

# Lottery Revenue Estimate: 2011 Forecasted Adult Population 49,970 Average per capita revenue \$347.16

\$17.35

Source: The Innovation Group

Estimated Lottery Revenue (\$M)

# Participation Rate Lottery Revenue Estimate

The next table shows participation rates and average win/patron for the share of the public that plays in each of the comparable markets. Participation rates are fairly consistent with the exception of Texas, which appears to be a bit of an outlier. This may be due to the aforementioned changes in the lottery parameters which alienated some players. Trinidad, Barbados, and the United Kingdom are all relatively low in terms of the revenue per player, with levels below \$300 for each. The U.S. markets are all above \$500, and Massachusetts is the highest at \$1,113. Across all of these markets, 69% of the total adult population plays \$502 dollars annually on lottery products.

**Participation Rate Lottery Revenue Examples** 

	United	Tuluidad	Darbadaa	New	Uses	Taura	Augusta
	Kingdom	Trinidad	Barbados	York	Mass	Texas	Average
Participation Rate	70%	72%	92%	61%	82%	38%	69%
Average Win/Patron	\$270.84	\$222.02	\$265.90	\$621.17	\$1,113.27	\$516.53	\$501.62

Source: The Innovation Group, La Fleur's 2008 World Lottery Almanac, Camelot, U.K. Statistics Authority, Trinidad National Lotteries Control Board, Trinidad and Tobago Central Statistics Office, New York Lottery, New York State Data Center, Massachusetts State Lottery, U.S. Bureau of Economic Analysis, Texas State Lottery, State of Texas, GTECH

Based on the forecasted adult population of 49,970, the participation rate of 69%, and an estimated win of \$502 per participant, it is estimated that revenue of \$17.4 million will be generated in the lottery's first year of operations. This estimate is largely in line with our estimate based on a per capita basis.

Lottery	Revenue	Estimate:	2011	
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Forecasted Adult Population	49,970
Participation Rate	69%
Sales per Client	\$501.62
Estimated Lottery Revenue (\$M)	\$17.35

Source: The Innovation Group

### Revenue Conclusion

The estimates based on revenue per capita and participation rate are obviously within such close proximity that rounding, for our purposes, causes them to be identical. The lottery revenue as a share of GDP is based on an extraordinarily high GDP relative to the population, in Bermuda's case, and severely skews the resulting average.

#### **Revenue Estimates**

Tte Chae Estimates	
Lottery Revenue/GDP	\$51.5
Per Capita	\$17.3
Participation Rate	\$17.3
Average	\$28.7
Average without GDP Estimate	\$17.3

Source: The Innovation Group

Obviously, due to rounding, there is no discernable change in the revenue estimate when averaging the two population-based estimates. The Innovation Group maintains that this more conservative estimate is warranted for forecasting purposes for three main reasons. The first is that Bermuda's GDP is disproportionately high, on a per-capita basis, compared to most other nations. The second is that the demographics and psychographics of the island are likely to favor casino rather than lottery gaming as a form of entertainment. The final reason is that most industry experts, including managers, machine manufacturers, and consultants, agree that population-based estimates tend to be more accurate.

Assuming that a \$17.3 million estimate was achieved by a lottery in Bermuda and that 30% were returned to the government, \$5.2 million could be added to the Bermudian Tourism Department's budget. This amount could be added to the existing \$35 million budget to further promote tourism. However, given the current occupancy rates and cost to build in Bermuda, it is unlikely that these additional funds would make Bermuda more competitive with other regional tourist destinations. Furthermore, any additional tourism would be unlikely to drive additional investment in new facilities since the hotel inventory is currently underutilized.

# **Section III: Internet Gaming**

# INTRODUCTION

Internet gaming has experienced explosive growth with the spread of internet usage throughout the world. While growth slowed somewhat with the passage of the United States' Unlawful Internet Gambling Enforcement Act in late 2006, the industry continues to gain new players and loyal play from existing ones. The absolute size of this industry is difficult to gauge, as the majority of operators are privately held companies and the jurisdictions in which they operate do not require public reporting of their gaming revenues. According to Christiansen Capital Advisors, internet gambling revenue in the United States was \$5.9 billion in 2005. Current estimates from other sources put the internet gaming market worldwide in the range of \$15 billion annually.

Offshore finance centers are increasingly playing a major role in the internet gaming industry as jurisdictions such as the United States have become closed. Gaming companies seeking legality, banking opportunities, and a level of secrecy have flocked to such nations. Casino City, a respected traditional casino and online casino resource, tracks both English-language and other casino websites, and estimates that there are upwards of 1,300 English language casino gaming sites worldwide. These sites are largely based in countries with favorable tax and regulatory environments such as Gibraltar (178 English-language sites), Malta (301), Netherlands Antilles (262), Mohawk Territory of Kahnawake (285), Alderny (63), Antigua and Barbuda (89), and Costa Rica (211).

According to Internet Business Law Services, some of the most popular countries for hosting online gaming companies are:

- Africa: Comoros, Mauritius, South Africa, Tanzania, Seychelles
- Asia-Pacific: Australia (Northern Territory, Queensland, Tasmania, New South Wales, Victoria, Western Territory), Hong Kong, Macau (China), Maharashta, India, Nepal, New Zealand, Norfolk Island, North Korea, Philippines, Solomon Islands, South Korea, Taiwan, Vanuatu, Vietnam
- <u>Caribbean:</u> Antigua & Barbuda, Dominica, Dominican Republic, Grenada, Jamaica, Curacao, St. Kitts & Nevis, St. Vincent, U.S. Virgin Islands
- Central America: Belize, Costa Rica, Nicaragua, Panama
- <u>Europe:</u> Alderney, Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Gibraltar, Iceland, Ireland, Isle of Man, Jersey, Latvia, Liechtenstein, Luxembourg, Malta, Monaco, Norway, Russia, Sark, Serbia, Spain, Slovenia, Sweden, Switzerland, The Netherlands, United Kingdom
- Mediterranean: Cyprus, Israel
- North America: Canada, United States (some firms still operate despite current law)

Efforts to overturn the existing legislation in the United States, which had been a huge market for online gaming, have existed since the passage of the ban in 2006. Most recently, Representative Barney Frank (D-Massachusetts), Chairman of the House of Representatives Financial Services Committee, has introduced a bill that, if passed, will legalize and tax internet wagering. No previous, similar efforts have succeeded.

# ONLINE GAMING LAW

For much of the world, there are no laws legalizing, prohibiting, or even regulating internet gambling. Notable exceptions are presented below.

### United States and UIGEA

In October 2006, the Unites States passed the Unlawful Internet Gambling Enforcement Act ("UIGEA"). This law is an attempt to reach off-shore gaming operators by attacking the payment mechanisms by which U.S. online gamblers place their bets. UIGEA "makes it illegal for banks, credit card companies or similar institutions to collect on a debt incurred on an online gambling site" (American Gaming Association).

With the enactment of UIGEA, a number of online gaming sites cut off play from American players. However, many still continue to accept U.S. play in violation of this law. The U.S. Justice Department and some individual states have arrested and prosecuted the heads of online gaming companies for violating online gambling laws. As recently as December 2008, a cofounder of PartyGaming, one of the largest and most profitable online gaming companies, pleaded guilty to charges brought against him in the United States (stemming from his arrest two years ago). Anurag Dikshit agreed to pay a \$300 million fine and still faces a possible two-year jail sentence. The fine, however, could be reduced through negotiations being held with PartyGaming.

The legal ramifications of conducting online gambling in the United States remain unclear. UIGEA does not define what exactly online gambling includes, and leaves open many issues to interpretation. Some readings of UIGEA have led state lawmakers to the conclusion that online gambling is under the jurisdiction of individual states. In this light, the State of California is currently considering legislation to legalize online poker for California residents with the stipulation that the online sites available to its residents must be based within the state (so that no inter-state or cross-country commerce is involved). Other states, such as Illinois, Indiana, Louisiana, Massachusetts, Nevada, Oregon, South Dakota, and Utah have passed laws expressly banning internet gambling within their borders.

While disagreement over the legality of internet gambling in the United States remains, those sites accepting bets from U.S. players assume considerable risks in doing so.

U.S. law stipulates that online gambling by U.S. residents is not illegal, and no individual players in the U.S. have been charged for gambling online. The onus rests on U.S. banks – what is illegal are gambling related transactions. U.S. players currently use a type of "ewallet" to skirt around legal issues, yet these are not technically legal. Since UIGEA, some to the largest gaming companies have refused play from U.S. players in order to protect themselves from prosecution and from being sued by their shareholders. Privately held companies such as PokerStars have chosen to stay open to U.S. residents, citing their belief that the games skill games and therefore not illegal. Some sites that accept play from the U.S. will still refuse it from those residing within states which have specifically criminalized online gaming.

### Impact of UIGEA

U.S. law regarding internet gaming remains murky. The enactment of UIGEA has, however, changed the online gaming habits of Americans. The following data is from a 2009 survey conducted by Poker Players Research with regard to play in the U.S.

- Since the U.S. legislation that restricted online money play, 23% of all online money players have stopped playing;
- However, another 9% have started playing. Therefore, there are 14% fewer players (within this geographic universe);
- In the U.S., 29% have stopped playing and 8% have started, therefore there are 21% fewer players in the U.S.;
- Within the U.S. a further 11% say they may stop playing. 29% however, say they plan to start playing (again) within the next six months; and
- In the U.S. only 5% say that legislation has made them play less.

### Legality of U.S. Actions

The online gaming laws enacted in the U.S. have angered many in the international community. Last year, the World Trade Organization ruled against the U.S. in an online gambling case versus the small island nation of Antigua and Barbuda. The argument was that the current U.S. law violated treaty commitments to open its market in "recreational, cultural and sporting services." According to reports from the *Wall Street Journal*, "The U.S. countered that its policies were justified to protect public morals and public order ... But the WTO panel ruled that America wasn't applying its restrictions equally to foreigners and domestic operators." In the first few days of 2009, reports surfaced that the United States and Antigua have reached a settlement over the WTO ruling, however the details of this supposed settlement have not yet been made public.

Although losing this court battle, the U.S. government still continues to apply its domestic antionline gambling laws across its borders. Earlier this year, the European Union launched a probe into whether the U.S. Justice Department "selectively enforces its antigambling laws against European online firms that offer wagers on sports events" (WSJ, April 2008).

# Further Testing of U.S. Law

As detailed previously, U.S. anti-online gambling laws remain unclear. Many operators have tested the boundaries of UIGEA, and many will continue to do so with increasing creativity. One such test is being brought by BringIt.com. The company recently announced that it will begin "allowing players to link up their Xbox 360, Wii, or PlayStation and bet against players competing in such games" (Fantini's Gaming Report, December 2008). BringIt.com's owner believes that this is legal because most states allow wagering on skill-based games, and the site blocks customers from states that do not (Arizona, Delaware, Florida, Indiana, Iowa, Louisiana, Maryland, Montana, Tennessee, Vermont).

# Europe

There are a number of jurisdictions in Europe with online gaming operations, although some of the most popular are those where taxation is minimal (i.e. Malta, Gibraltar). The European Union has basically been against online gaming monopolies, and in favor of free trade principles with regard to online gaming sites. Lately, France has attempted to forge European Union-wide Internet gambling regulations. According to Fantini's Report, "France is among the countries that sanctions monopolies on Internet gambling, but is under European Union pressure to open its market to competition. The UK and Malta are home to many of those companies. Britain said some of the measures promoted by France, such as blocking financial transactions and capping players' rate of return have already been rejected by the European Commission."

In the last year, the online gaming industry in Europe has sought help from the EU in an effort to ensure a "safer and more secure online gaming environment for consumers" (Responsible Gaming Day press release). The operators present at the mid-2009 Responsible Gaming Day recognize that for growth to occur, consumer protections must be in place. Large European operators such as PartyGaming, Unibet, bwin, and Bet-at-home.com have led this discussion.

Bucking the EU, The Swedish National Gambling Consultation recently recommended to the government that Swedish citizens be blocked from accessing online casinos based outside of its borders (*Fantini's Report*, December 31, 2008). The only internet gaming provider currently operating in Sweden is Svenka Spel, a government owned monopoly. If such a UIGEA-like ban is enacted, other internet casino companies would surely protest to the European Union on grounds that it would violate competition and trade rules.

In large measure, European countries have begun legalizing online gambling primarily as a way to regulate and eventually tax the industry.

### **New Operations**

As online gaming continues to grow in Europe, the Czech Republic recently announced that the state-owned lottery and sports betting operator, Sazka, will be launching a play-for-fun online gaming site (*Global Gaming Business Weekly*, October 2008). Further, it has been reported by *igamingbusiness.com* that a handful of bookmakers, including Fortuna Group, may soon be authorized to handle Internet wagering.

# Other Countries

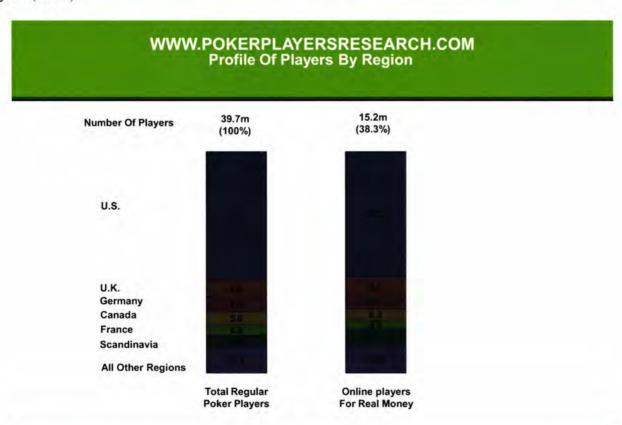
As discussed in the *Taxation Trends* section later in this report, there are a number of other countries where Internet gambling is legal or which host large numbers of gambling websites. Countries such as Costa Rica have a laissez faire attitude toward Internet gambling, and ones such as Antigua and Barbuda view the issue as one of fair trade. Malta and Gibraltar, among others, have lax tax codes which lure all types of businesses, and just so happen to attract Internet gambling sites as well.

# ONLINE CASINO PLAYERS

In 2008, The Innovation Group conducted primary market research into the behavior of U.S. residents who gamble online. Poker Players Research, an independent research firm regularly conducts large surveys (10,000 regular poker players playing at least once a month across the U.S., Canada and Western Europe) of online gamers. The following section details relevant data from our proprietary survey as well as data from Poker Players Research and other industry sources.

# Number of Players and Country of Residence

According to Poker Players Research, in January 2007 nearly 40 million people play poker regularly with 23 million of these regular players residing in the U.S. (10.1% of the U.S. adult pop.). Further, 15.2 million adults worldwide play online for money, and 7 million play online for money at least once a month. For comparison, 10 million have played in a casino in the last year (1.6%).



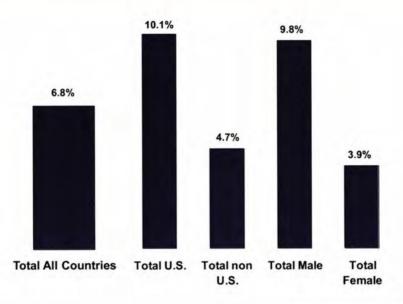
Prepared by Poker Players Research Ltd.

Jan 2007

Sample size 10,000 regular poker players each wave.

While nearly 7% of the surveyed populations play poker online regularly, at the time of the survey the incidence was higher in the United States, where over 10% of adults play poker online. This compares to less than 5% for the other surveyed regions (Canada and Western Europe). Men appear to be more than twice as likely as women to play poker online.

# WWW.POKERPLAYERSRESEARCH.COM Percentage Of Population Playing Poker Regularly (At Least Once A Month)



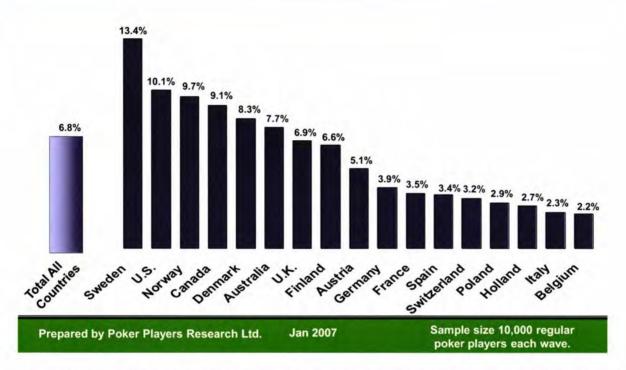
Prepared by Poker Players Research Ltd.

Jan 2007

Sample size 10,000 regular poker players each wave.

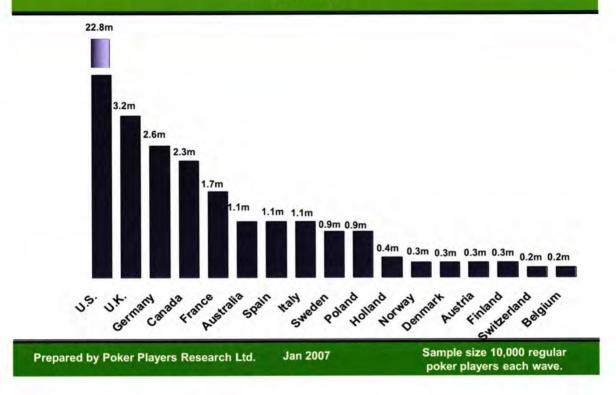
However, the United States does not have the highest incidence of play. In Sweden, 13.4% of the adult population surveyed in January 2007 reported playing poker online. While the U.S. ranked second at 10.1%, Norway, Canada, and Denmark all approached 10%. Other countries had significant rates of play, as shown in the following table:

# WWW.POKERPLAYERSRESEARCH.COM Percentage Of Population That Are Regular Poker Players (Playing At Least Once A Month) By Country



On a percentage basis, Sweden's population shows the highest penetration of online poker play, with 13.4% of all Swedish adults playing online at least once per month. However, in terms of volume, the U.S. market makes up the largest share of the online poker market, as shown in the following chart.

#### WWW.POKERPLAYERSRESEARCH.COM Number Of Regular Poker Players (Playing At Least Once A Month) By Country

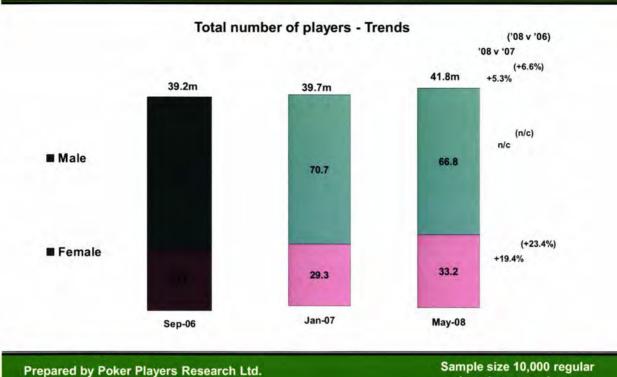


# Demographics

The proprietary primary research conducted by The Innovation Group revealed that online poker players tend to be young, with the largest share of players being 25-34; and Males making up approximately 70% of online poker players. This is consistent to data from Poker Players Research, wherein: of the 15 million online money players, 70% are male, and 58% are under 35 years of age.

#### WWW.POKERPLAYERSRESEARCH.COM

#### Playing Poker At All At Least Once A Month



Further, The Innovation Group's research showed that online gaming in the U.S., and more specifically online poker play, is largely participated in by Caucasians (over half), with Asians making up less than 20% of players.

When considering income levels, The Innovation Group survey found that online poker players are concentrated in the \$20,000 to \$150,000 income brackets, while play falls off sharply for those with incomes below \$20,000 and above \$150,000.

# Play vs. Wager

While a large number of gamers play casino games and poker games online, many play "free games" where no real wagers are made. Our 2008 survey indicated that of those that have played poker online, 30-40% have not wagered on poker online. According to Poker Players Research, 2.6% of all adults worldwide play online poker for money. In the U.S., that number is 3.8%, with the U.K. at 3.2%. The table below details these estimates.

poker players each wave.

#### Online Wagering Propensity (% of adults that play online noker for money)

,
2.6%
3.8%
3.2%
3.2%
6.2%
1.3%
1.2%
4.0%
1.2%
5.0%
7.2%

Source: Poker Players Research, May 2008

In our survey, the wager rate was lowest among those aged 45-49. As age increases, there is also a hesitance to wager in poker games online, with the majority of those 65 and over not wagering when they play poker online. The survey also found that Male online poker players are only slightly more likely to have wagered on those games than females. Asians are most likely to wager on online poker games, with approximately three-quarters of Asian online poker players wagering on games. African American online poker players are the least likely to wager, with only about half of them doing so.

According to our 2008 research, the highest incidence of wagering by online poker players occurs within the \$150,000 to \$250,000 income bracket. The lowest incidences came from the highest and two of the lower income brackets, with about half of online poker players with incomes over \$250,000 wagering on their games, and more than half of those with incomes \$20,000 to \$60,000 wagering on games.

#### Amount Wagered

According to Poker Players Research, 88% of online money players play for stakes that mean they usually win or lose less than \$100 a day, and only 2% play for stakes that mean they win or lose over \$1,000 a day.

#### Market Growth

Going forward, the growth in online gaming is expected to continue. According to The Innovation Group's 2008 survey, approximately 3-6% of online poker players stated that they expect to play online poker less in the next year, with 65-85% saying that they'll likely play the same number of times, and less than 20% stating that they expect to play more. For those expecting to play less, well over half said it was due to their concerns about the economy or because of personal budget constraints. Of those expected to increase their play, nearly half said it was because of increased interest or enjoyment from playing.

reasons for five flaving	Reasons	for	Not	Pl	aving
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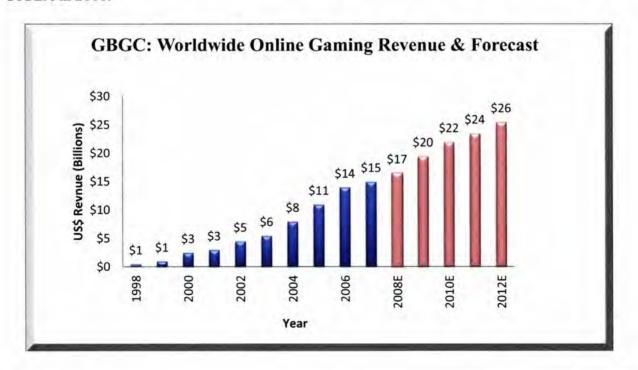
Among The Innovation Group's 2008 survey respondents who haven't played poker online, the leading reasons why not were the following: fear of being scammed or taken advantage of; personal budget constraints; and prefer real casinos to online casinos.

# ONLINE GAMING MARKET REVENUE ANALYSIS

The following section outlines various data on the performance of the online gaming market as provided by numerous sources tracking the industry. As the market is highly unregulated, there is no one source for fully precise or reliable figures; however, industry revenue estimates are consistently in the range billions of dollars (our research found no reliable data on tax revenues to governments). This information therefore provides a multi-faceted view of estimated revenue and growth potential of the industry from independent sources involved in the business. This includes Global Betting and Gaming Consultants, Christensen Capital Advisors, Microgaming and H2 Gaming Capital.

# Global Betting and Gaming Consultants

According to the organization Poker Voters of America, online gambling generates approximately \$15 billion in annual revenue by operators of offshore gambling websites. This non-profit organization which seeks to support political leaders who are in favor of legalization of online play does not, however, conduct any internal comprehensive research. This figure was likely obtained from Global Betting and Gaming Consultants ("GBGC"). In 2007, GBGC estimated the global gaming market's gross revenue (defined as betting stakes less customer winnings) to be at \$328 billion, up from \$309 billion in 2006. According to their study, online gaming revenue accounted for 5% of this, or \$15 billion, with online poker revenue representing approximately \$3 billion. For 2008, worldwide figures are expected to reach \$347 billion, with \$16.5 billion attributable to online gaming. Average annual growth rates for this gaming niche are forecasted to average 10.3% through 2012, while offline gaming is anticipated to grow at an annual average of only 2.2%. Following is a graph estimating their historical revenue figures and forecasted trend for the internet gaming market. Note that the slow growth between 2006 and 2007 may be attributable to delayed reactions in the U.S. from the implementation of the UIGEA in 2006.



Source: Global Betting and Gaming Consultants (GBGC); The Innovation Group \*Actual Figure / Forecasted Figures

The following graph demonstrates GBGC figures for online poker revenue based on their 10.3% anticipated annual growth rate for the online gaming industry. As online poker is the fastest growing sector for this industry and has experienced significant growth in recent years, it is possible that the actual figures could exceed these estimations.



Source: Global Betting and Gaming Consultants (GBGC); The Innovation Group

\*Actual Figures / Forecasted Figures

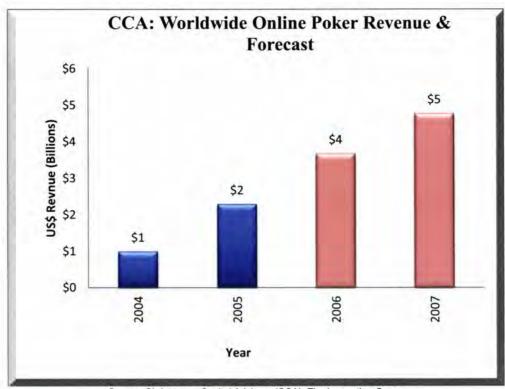
# Christiansen Capital Advisors

According to Christiansen Capital Advisors' ("CCA") 2005 eGaming data report, overall internet gambling revenue yielded approximately \$12 billion in 2005, with online poker representing \$2.5 billion. In their study, that was conducted prior to the UIGEA, the estimation for 2008 revenue reached just over \$20 billion, nearly \$4 billion more than GBGC's figure. The graph below displays their figures from their 2005 report.



Source: Christenson Capital Advisors (CCA)
\*Actual Figues - / Forecasted Figues -

Online poker revenue was estimated to be approximately \$1 billion in 2004 and was projected to grow by 60% in 2006 after growing 130% in 2005. For 2007, CCA anticipated a growth rate of 30% from the 2006 figure, which would result in online poker revenue of \$4.8 billion. A more updated report was not available; however, the firm recently reported that online poker will soon be the biggest generator of revenue for online gaming as a result of the game's continually increasing popularity and constant television coverage.



Source: Christenson Capital Advisors (CCA); The Innovation Group
\*Actual Figuration\*

/ Forecasted Figuration\*

## Microgaming

In 2005, Microgaming also provided insight on the online gaming market using a combination of sources including Casino City, River City Group, and GBGC. They reported that the overall online gaming revenue was nearly \$13 billion in 2005, of which 12% consisted of online poker rooms. This resulted in an estimated \$1.6 billion in poker revenue, nearly one billion dollars less than GBGC's and CCA's estimate for that same year. Also before the UIGEA, the organization estimated that 2008 online gaming revenue would be approximately \$18 billon, running closer to GBGC's estimated \$16.5 billion vs. CCA's estimate of just over \$20 billion. Microgaming went on to forecast that online poker would reach \$5 billion in revenue by 2007 and over \$7 billion by 2012. This equates to an annual average growth rate of 7%, which would result in an online poker revenue estimate for 2008 of approximately \$5.3 billion. Estimates of their worldwide online gaming figures and future online poker revenue are showcased in the following graphs.



Source: Microgaming; The Innovation Group
\*Actual Figure / Forecasted Figure



Source: Microgaming; The Innovation Group
\*Actual Figure / Forecasted Figure
\*\*Figures based on Annual Average Growth Rate (AAG) of 7%

## **H2** Gaming Capital

Specific to online poker revenue, H2 Gaming Capital has tracked the sector's performance and forecasted growth into 2012. The UK based consulting firm, which specializes in online and offline gaming industry research, estimated 2005 online poker revenue to be \$2.6 billion, which corresponds with GBGC's and CCA's estimates for that same year. 2007 revenue showed a decrease from 2006 revenue of approximately \$125 million due to the enactment of the UIGEA. H2 Gaming Capital estimates that online poker revenue will total \$3.7 billion for 2008 and reach \$5.3 billion by 2012, reflecting a 43% growth rate.



#### Conclusion

The following tables combine revenue trends by source. Figures provided for online gaming revenue are estimations based off of the previously presented charts and therefore are not exact. In addition, some of the online poker revenue figures are based off each source's presumed growth rates for the industry through 2012. Detailed explanations are documented in the footnotes of each table. Any source without notations was retrieved directly.

Worldwi	de Or	iline (	Gamin	g Rev	enue	Trend	l: Mul	tiple !	Sourc	es (\$ t	illion	s)
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
GBGC**	3.0	4.5	5.3	8.0	10.6	14.5	15.0	16.5	19.5	22.0	23.5	25.5
CCA	3.1	4.0	5.9	8.2	12.0	15.2	18.4	20.7	22.7	24.5	N/A	N/A
Microgaming**	5.2	6.1	7.1	9.5	13.0	14.3	17.0	18.5	20.0	21.5	22.0	23.1

<sup>\*\*</sup>Annual figures are either estimations retrieved from source-provided graphs or quoted figures from various data sources.

/ Forecasted Figures -

\*Actual Figur

Worldwide Online Poker Revenue Trend: Multiple Sources (\$ billions)

	2005	2007	2012E
GBGC*	2.6	3.0	5.5
CCA**	2.5	4.8	N/A
Microgaming	1.6	5.0	7.0
H2 Gaming Capital	2.6	3.1	5.3

<sup>\*</sup>GBGC's 2012 forecast based on their estimated 10.3% average annual growth rate for online gaming revenue.

\*\* CCA's 2007 figure based on expected growth rate of 30% from their estimated 2006 online poker figure.

Overall, GBGC appears to provide the most updated, accurate research, having consistently followed the online gaming industry since its beginnings in 1996. Based on their findings, online gaming revenue will reach \$16.5 billion in 2008 and is expecting to exceed \$25 billion by 2012. Online poker revenue, which was estimated at \$3 billion in 2007, is expected to continue its fast-paced growth, reaching \$5.5 billion by 2012. This growth is anticipated to be especially aggressive in Europe where its market share for online poker is projected to reach nearly 48% in 2008 as compared to 38% in 2007. In America, market share is expected to continue to decline from 55% to 42% during this same period due to the UIGEA.

# Online Gaming Operator Performance

The following section showcases operating figures and margins for various online gaming companies. The data provides insight into the performance of each entity from 2005 to 2007 as provided by their annual reports. A more complete listing of online gaming operators is included in the *Appendix* to this report. The following competitors are evaluated:

## **PartyGaming**

Best known for its online poker room PartyPoker.com, PartyGaming is an online gambling leader. The company offers a variety of games through an integrated platform and through numerous secondary brands. Headquartered in Gibraltar, the company was founded in 1997 and quickly became the world's largest online poker brand. Post UIGEA, the company continues to expand in various European markets.

## 888 Holdings

Founded in 1997, the company operates several high-profile gambling websites, including, but not limited to 888.com, Casino-on-Net.com and PacificPoker.com. The company develops and manages principal aspects of its operations in-house, including software development, marketing, business development and risk management.

## Playtech

One of the leading gaming software development companies, founded in 1999, the company provides software for online casinos, online poker rooms, online bingo games, and fixed-odds arcade games online. Playtech is the owner of iPoker, which is a groundbreaking multiplayer poker product where each licensee runs on the same software and backend but provides multiple poker room options with a different looks and feel to all players.

#### Unibet.com

Founded in 1997, Unibet is one of the largest online gambling operators in the European market. The company's business is predominately focused in online sports betting but also offers live betting, casino, poker, lotteries, bingo and soft games through the group's web site.

# **Total Gaming Revenue**

Below are revenue and EBITDA figures for each competitor from 2005 to 2007 as detailed in their annual reports. Figures include any revenue from discontinued operations as a result of the UIGEA in 2006. 888 Holdings, as well as PartyGaming—who had a large stake in the U.S—show a decrease in revenue in 2007, reflecting this enactment. PartyGaming's lower EBITDA margin in 2007 is largely due to losses incurred by discontinued operations for that year (approximately \$26 million). Based solely on their continued operations post the UIGEA, EBITDA for the company was \$50.7 million in 2006. 2007 EBITDA was \$111.7 million, resulting in a more than 115% increase in profits. For 888 Holdings, continued operations post the UIGEA had net gaming revenue of \$157 million for 2006. This would result in a 36% increase in revenue for 2007, which was an estimated \$213.3 million. In addition, 888 Holdings expanded its business into online bingo mid-year 2007 with the purchase of Global.com Limited, and is expecting 2008 revenue to fully rebound to 2005 figures. EBITDA margins appear

relatively steady for the company, averaging approximately 25% throughout this three-year period.

**Online Gaming Competitors Performance** 

	Party Gaming	888	Playtech	Unibet
2005* Net Gaming Revenue	\$977.7	\$271.0	\$47.6	\$65.0
EBITDA	\$584.8	\$66.7	\$35.6	\$29.7
%	59.8%	24.6%	74.7%	45.7%
2006 Net Gaming Revenue	\$1,104.9	\$289.9	\$90.1	\$107.2
EBITDA	\$550.7	\$85.6	\$65.1	\$42.6
%	49.8%	29.5%	72.2%	39.7%
2007 Net Gaming Revenue	\$476.0	\$213.3	\$103.6	\$121.6
EBITDA	\$87.0	\$45.5	\$66.3	\$32.0
%	18.3%	21.3%	63.9%	26.3%

Source: Annual Reports - PartyGaming/888/Playtech/UniBet

items such as reorganization costs and non-recurring adjustment to revenue.

Playtech and UniBet appear to be less affected by the UIGEA. This may likely be due in part to Playtech being a software gaming provider and would further explain its high EBITDA margins as the company does not invest as much of its funds into items such as sales and marketing. UniBet has largely been focused in the European market, which has helped to maintain its continuous revenue growth, though expenses seem to have increased throughout the years. In 2007, UniBet acquired Malta-based Maria Holdings and is expected to see major growth in revenue for 2008 as the acquired organization owns a number of online betting domains.

Below is a table of each competitor's gaming revenue mix based on contribution percentages. Total gaming revenue for PartyGaming is primarily from online poker; however, their online casino sector has grown over the years, representing 12.1% of total revenue in 2005 and reaching 31.3% in 2007. Playtech experienced an opposite trend, likely due to the recent creation of their iPoker platform. 888 Holdings appeared to be approaching a near balance split in revenue between online poker and casinos in 2005 and 2006. Upon adding online bingo into their business in 2007, however, it may have cannibalized some of their poker revenue contribution. In addition, the company has also launched an online sports betting platform in 2008. UniBet, which has a large percentage of its business in online sports betting, does not provide a breakdown for its online poker sector, which is rolled up into other revenue. Though revenue contributions from sports betting continued to grow into 2006, the company's annual reports make mention of an increased interest to grow their online poker sector, which may be a reflection of the stagnant growth in 2007.

Online Gaming Competitors: Gaming Revenue Breakdown

	2005			
	Party Gaming	888	Playtech	Unibet
Poker	87.9%	40.5%	5.7%	0.0%
Casino	12.1%	59.5%	89.7%	0.0%

<sup>\*</sup>Unibet annual report figures converted from GBP based on \$1.49 conversion

<sup>\*\*</sup>PartyGaming profit figures are based on 'clean' EBITDA analysis, which does not factor in

0 1 0 11	0.00	0.00/	0.00/	00.00/
Sports Betting	0.0%	0.0%	0.0%	60.0%
Other/Emerging Games	0.0%	0.0%	4.6%	40.0%
	2006			
	Party Gaming	888	Playtech	Unibet
Poker	74.7%	44.5%	12.1%	0.0%
Casino	24.5%	55.5%	85.7%	0.0%
Sports Betting	0.5%	0.0%	0.0%	67.7%
Other/Emerging Games	0.3%	0.0%	2.2%	32.3%
	2007			
	Party Gaming	888	Playtech	Unibet*
Poker	65.3%	37.9%	26.4%	0.0%
Casino	31.3%	55.4%	72.1%	0.0%
Sports Betting	3.4%	0.0%	1.4%	67.3%
Other/Emerging Games	0.0%	6.8%	0.0%	32.7%

# ONLINE CASINO OPERATING CONSIDERATIONS

# Taxation Trends

Taxation on online gaming companies and their revenues varies by jurisdiction. As stated earlier in this report, online gaming companies have tended to base themselves in tax-havens such as Antigua and Malta, or in countries with lax regulation such as Costa Rica. As the EU moves toward some type of regulation of online gaming, discussion about appropriate taxation levels has begun. The following section details information from various sources including *Internet Business Law Services* regarding the tax structures for some of the more popular jurisdictions for online gaming.

#### Malta

In Malta, poker sites pay a gaming tax of 10% of the net rake (rake less bonuses, etc.) but subject to a maximum of \$500,000 per year. The income tax on a Malta company is 35% of the profits made, but through a system of refunds of taxes, the actual tax comes down to approx. 5%. Companies that are granted a Maltese license are not allowed to take bets from Island citizens. The preliminary licensing fee totals more than  $\in$  2,300, while the annual license fee is approximately  $\in$  7,000. Maltese law states that the maximum gaming tax payable annually by one licensee regarding a license shall not exceed approximately  $\in$  460,000.

The financial benefits which accrue to Malta as a result of offering online gaming are not overly significant. Tax revenues from these companies are minimal as is job creation (as shown in public reports, few executives are domiciled in Malta, with the majority of employment outsourced to countries with low wage rates).

#### Gibraltar

In Gibraltar, Internet casino gaming is taxed at one percent of the gaming yield – up to £42,500,000 of annual gaming yield, with the casino gaming tax capped at £425,000 per year. The minimum annual tax liability of an operator is £85,000.

Gibraltar has long offered tax-exempt status for companies owned by non-residents provided that the company has no business relations with any resident. This tax system is and proposed changes to it are, however, under review in European Courts. It is expected that on-line gaming companies still will not pay a gaming tax per se. But, it seems that a corporate tax of about 10-12% will be placed on all businesses, and that certain exemptions will be phased out (some "offshore" companies were effectively paying no or very little tax). The EU courts have said that this exemption model is illegal. This appears to level the playing field a bit – making tax havens like Bermuda potentially as attractive as Gibraltar for attracting online gambling companies.

Much like the case in Malta, the financial benefits to Gibraltar for hosting Internet gambling companies are few. Tax revenues from these companies are minimal whereas job creation is debatable. While most public filings show executives live elsewhere, a 2007 article by Gilbert

Licudi and Peter C. Montegriffo speculates that 10% of Gibralter's workforce of approximately 20,000 people are employed by the industry.

## United Kingdom

The United Kingdom currently has a separate taxation system for onshore versus offshore gaming operators. Currently, "offline operators pay a gross profits tax, but offshore providers established elsewhere in the European Union are not subject to tax on revenues from UK customers" (Gambling Compliance). This structure has agitated local bookmakers such as Ladbrokes (paying a tax of 15% on gross profits) with the competitive advantage that this system has afforded its offshore competitors.

## Italy

Italy charges an equal tax rate on land-based and online gaming operators. However, this tax structure for online gaming companies has been called "half pregnant" by a chief executive at Unibet. Petter Nylander was quoted by *Gambling Compliance* as saying that such "regimes in which offshore companies [are] forced to match incumbent land-based operators on taxations ground leave those companies . . . effectively priced out of newly liberalized markets" (*Gambling Compliance*, September 25, 2008).

## Alderny

Alderny, an island off the coast of the U.K. does not levy sales or gambling taxes. In the case of most online gaming operators, licensees are able to claim tax exempt status by paying a flat annual fee of £600. The annual fee for a full license is GBP £70,000. A Reduced Activity License is paid for on a daily fee basis. All licenses need annual renewal. At the time of application, the applicant is required to pay a deposit of GBP £10,000 and the cost of investigations.

#### Panama

According to Internet Business Law Services, "Internet gaming companies domiciled in Panama enjoy complete tax exemptions. Customs duty concessions are given for imports needed to carry on Internet gaming. As long as the income made from Internet operations are to jurisdictions outside of Panama, there is no income tax, with-holding tax, sales tax or VAT taxes."

#### Costa Rica

Costa Rica, like many host countries for online gambling companies, does not currently have laws which deal with gambling over the Internet. The government position has traditionally been that the companies operate legally as long as they refuse wagers from individuals in Costa Rica. According to Casino City, "because there is no official regime to recognize license holders, there is no betting or gaming tax. Instead, companies operate under a "data processing" license."

Various proposals have been introduced by local government which would tax these operations based on the number of employees on the payroll, with fees ranging from \$19,200 to \$54,600 per year. Such proposals have enjoyed cool receptions, and no taxation is expected to be enacted in the near future due to the country's laissez faire view of the online gaming industry.

## Antigua and Barbuda

The island nation of Antigua and Barbuda has been at the center of much debate in the international community over the legality of U.S. anti-gambling laws, with the country filing suit and eventually winning a favorable judgment by the World Trade Organization. According to Internet Business Law Services, Internet gaming operators in the country are "required to pay 3% tax on their net win. Operators are entitled to deduct software licensing or software development costs from the Net Win. These deductions may only amount to 40% of the Net Win. Operators can also claim deductions on credit card fees for a period up to 18 months after the original charge was made. The 3% rate of tax on Net Win and provisions regarding deductible expenses were fixed through 2006. They are now reportedly under government and industry review." In addition, companies must also pay annual Gaming License fees of US \$75,000 and Wagering License fees of US \$50,000.

A brief review of the tourist visitation trends to this island nation have shown no significant increases in tourism that can be attributed to Internet gambling. The advent of this industry in Antigua and Barbuda has centered on local job creation (although minimal) and tax revenues.

#### Curação and Netherlands Antilles

According to Casino City, "Internet gaming became a central industry for the island of Curacao in 2002 when the regulation of online gambling was decentralized from the Curacao Gaming Control Board." After a review process, provisional licenses are granted with a payment of USD \$33,708. License holders pay USD \$5,618 per month in license fees during the first two years, after which new license fees are negotiated. (Casino City)

#### Kahnawake

The Mohawk Territory of Kahnawake is located within Canada, but is a sovereign state operating under local rule. A large number of gaming sites have located here due to favorable taxation and lax regulation.

According to Casino City, the application fee for online gaming operators is CAD \$5,000, in addition to a CAD\$15,000 nonrefundable deposit for probity checks and systems testing. "Interactive gaming licenses are granted for two-year periods, and annual license fees are CAD\$10,000. The Gaming Commission also awards secondary client provider authorization licenses, for which either an applicant or an authorized client provider may submit an application. If the applicant submits the application for a secondary client provider authorization, it must be accompanied by a \$15,000 fee. If an authorized client provider submits the application it must be accompanied by a \$5,000 fee. Authorization is good for two years, and applications are \$5,000. Key-person licenses are also required for each individual with a prominent role in the operation of a licensed entity. Key-person license application fees are \$2,500." (Casino City)

It should be noted that a recent large scale Internet poker cheating scandal involved Kahnawake licensed gaming operators, Ultimate Bet and Absoulte Poker. This scandal has brought much criticism on the Kahnawake Gaming Commission, and increased public pressure for regulation of the online gaming industry.

# Technology

The technology involved in online gaming is constantly changing. Online gaming sites are constantly upgrading their interfaces or skins, constantly trying to stay ahead of hackers and fraudulent play, and constantly trying to prevent underage gaming which would further tarnish the image of the industry. The following section briefly assesses some of the major technology issues relating to online gaming.

## Payment and Transfer Systems

Currently, payments to and from online gaming companies are largely handled through "ewallet", wire transfer, and other similar services. With the passage of the United States' UIGEA, it became illegal for major credit card companies to issue payments directly to online gaming companies from U.S. residents. While not technically prohibited from making payments from non-U.S. card-holders, the major credit card companies have largely shied-away from doing so. What has resulted has been the emergence of these unique payment services.

Websites offering advice to would-be online gamblers suggest that attempting to use a credit card as a casino deposit method is typically problematic, and that users fare better with alternative deposit methods. Electronic wallets, or "ewallets", are funded with the player's credit card or bank account — the "ewallet" serves as an intermediary between the financial institution and the online gaming site. Neteller, Cash Transfer Express, eChecks, ePassaporte (non-US customers only), and eWalletXpress are just a handful of the numerous "ewallets" used for online gambling purposes today. In some cases, online casinos will accept more direct forms of payment through direct transfers from players' bank accounts. Such transfers are, however, much less common than the use of the more secure "ewallets".

Online casino companies are constantly adding new payment options for their players in search of improved payment processing and increased security measures. Furthermore, some payment methods are available only to players residing within certain countries (Europa Casino announced new payment options for its players in December 2008, including *Giropay* for Germany, *Nordea* for Swedish and Finnish players, *EPS* for Austria, and *Enets* to serve players in Singapore. These payment methods are all backed by Moneybrokers, an industry leading online payment method). In South Africa, *Ukash* has recently launched a secure payment processing service, tailored to a market where 40% of the population does not make use of any banking services. Ukash accounts are pre-paid through terminals where players purchase vouchers.

(Online Gambling Insider, December 2008).

According to *BigEye.com*, an advisory site for online gamers, "some deposits require full personal and bank information . . . others require only a valid e-mail address. The speed of the transfer also varies by payment method, as does the possible transfer fee. Online casinos offer financial benefits for using the different payment methods, varying from 5% to 15%."

# Security and Enforcement

Online gaming companies initially relied on simple birthdate questions to screen for underage gamers. But, understanding that fraud, underage gaming, and illegal gambling are all major

obstacles for online gaming companies, a host of technology companies have developed and continue to develop software and services to go a step further. Companies such as 192.com, Aristotle International, and Chartwell Technology are leaders in the development of age and identity verification systems, and Internet gaming software systems. Such firms are constantly seeking out new methods to prevent fraud for their customers, obtaining patents for their ideas and implementing ideas quickly.

Products such as Aristotle International's *Integrity*, are age verification services which verify government-issued IDs for citizens (*Integrity* verifies for over 150 nations). According to the company's website, "the service operates on a variety of platforms, including internet, interactive voice response, mobile and hand-held devices. . . helps responsible merchants mitigate the risk of identity fraud online, at events and at point of sale." This system "integrates a government-issued ID database check and ID format algorithms [and] eliminates costs associated with manual intervention." Another new product, *Mobiclear* by Mobiclear Inc., is billed as a "real-time ID verification system [to] ensure that online casinos only accept legitimate transactions from legitimate sources." Such identity verification systems help to keep underage players out of online casinos and also help to prevent fraud and identity theft by players.

In addition to age and identity verification services, some tech companies offer self-exclusion services. These services allow problem gamblers to register in a database, which will serve to prohibit them from accessing online casino sites.

Even though there are numerous security measures available to online gaming sites, there still exist sites that do not take the proper precautions. Sites such as *Grand Prive Bella Vegas* have recently come under fire for allowing play by underage gamblers. While largely chastised by the industry, due to jurisdictional issues, it remains unclear whether such sites can be charged with any crime. Unscrupulous operators such as this have further increased the calls for regulation of online casinos.

It should be noted that security and enforcement issues with regard to Internet gambling are significant. Any government contemplating on-line gaming would need to consider not only the technical issues involved, but also the perceptions that can be created domestically and internationally by a flawed or insecure system.

# Scams, Arrests, and Prosecutions

While immensely popular, Internet gaming has suffered from lawsuits, criminal prosecutions, and various scams. Such scandals have increased pressure on governments to regulate online gaming and to protect consumers. The following section details a few notable instances of late.

#### Scams

Recently, the U.S. television show 60 Minutes reported on a major scam involving cheating by gaming company employees, bilking players out of tens of millions of dollars. Involved were employees of Ultimate Bet and Absolute Poker, both companies based in the Mohawk Territory of Kahnawake. These employees hacked into the online poker sites using an "administrator" mode, and were able to cheat at hundreds of thousands of hands of poker. The suspicious activity was first detected in early 2008 by players themselves. Unfortunately, follow up and

prosecution by the Kahnawake Gaming Commission has been nearly non-existent. This scandal has brought much criticism on the Kahnawake Gaming Commission, and has increased public pressure for regulation of the online gaming industry.

It is worth noting that according to a survey conducted by Poker Players Research taken *before* the scandal broke, "Players' greatest concern about fairness is that they might be playing against bots (computers) (41%). This is followed by worries about collusion amongst other players (33%)."

#### Prosecutions and Arrests

In 2006, the former chairman of U.K.-based gambling firm Sportingbet, Peter Dicks, was detained in New York. According to published reports, he was wanted in Louisiana on online gambling charges. At the time, extradition was not granted by the State of New York and he was released. This even caused many European Internet gaming industry executives to no longer visit or even stop-over in the U.S., for fear of arrest. (Wall Street Journal, April 2008)

While the temper of the U.S. Justice Department has simmered down somewhat, it has continued to threaten these companies although the sites stopped offering their services to U.S. customers after the passage of UIGEA. In December 2008, Anurag Dikshit pleaded guilty to charges brought against him in the United States (stemming from his arrest two years ago). Mr. Dikshit, the co-founder and largest shareholder of PartyGaming agreed to cooperate with the U.S. Department of Justice, pay a \$300 million fine, and still faces a possible two-year jail sentence. The fine, however, could be reduced through negotiations being held with PartyGaming. Dikshit is out of jail on bond and will be sentenced next December.

In May 2008, it was reported that an English-based website, whose owners work from within Turkey targeting Turkish gamblers, stole from Turks and laundered the money to several Swiss bank accounts. The website, superbahis.com, had its computers seized by Turkish police and thirty-nine people were taken into custody. Eleven suspects were released, while 28 are to stand trial, accused of establishing a criminal organization, being intermediaries in betting and gambling, and laundering a total of YTL 7 million (approx \$4.6 million USD).

# Impact of Recession

A November 2008 report issued by Sherman Bradley of the Online Casino Advisory concluded that offshore gambling sites are struggling to meet quarterly expectations because of the worldwide recession. Initially, the researcher believed that online gambling would be "cheaper for gamblers . . . than to travel to a place like Las Vegas or Atlantic City." The study, however, found that "players are still playing, but they are not playing or depositing nearly as much as they were." (Global Gaming Business, December 2008).

# CONCLUSION: PROS AND CONS FOR INTERNET GAMING IN BERMUDA

The following section compares the potential benefits and difficulties associated with the introduction of this industry.

## Pros

# Opportunity to be the Industry Model

As the online gaming community is itself calling for greater regulation and oversight, Bermuda has the opportunity to step up and become a model for the industry as a whole. Such a role could increase the prestige of Bermuda as a center for international business and trade.

#### Revenue Generation

As revenues for online gaming operations continue to grow, there is potential for local revenue generation for countries hosting such sites. However, it should be noted that online gaming operators have publicly stated that a taxation rate of over 10% would make operations difficult, and that countries attempting such a rate would not be sought out.

## Cons

# Perceptions & Illegal Activity

While traditional gaming operations have been largely successful at thwarting accusations of corruption, scams, money laundering and the like, online gaming operators have not. The regulation and oversight afforded physical casinos has rooted out much of the illegal and unscrupulous activity once associated with gambling. However, the loose nature of the Internet and of Internet gambling does not adhere easily to such a regulatory structure and significant scandals and scams have resulted. The perception of illegal activity occurring within Bermuda's borders could serve to deter businesses in the financial sector from locating or maintaining their offices in Bermuda.

#### Minimal Job Creation

Our review of annual reports from online gaming companies revealed that employment within the site's host country is not substantial (one unconfirmed news report in Gibralter argues otherwise). Companies such as PartyGaming have traditionally out-sourced much of the labor for their operations to India. The model has been for top-level management to reside within the host country, with technical issues and maintenance handled off site. Were online gaming companies to re-locate or incorporate in Bermuda, minimal impacts on employment could be expected.

# Sticky Legal Environment

The legality of online gambling across the world remains unclear and messy. Over the next few years, we would expect European nations as well as the United States to debate the merits of Internet wagering, with likely numerous lawsuits and battles forthcoming in the international courts. Any country attempting to become a host for online gambling will, inevitably, draw itself into such debates and wrangling with the international community.

# Negligible Impact on Tourism

Internet gambling is not a tourism draw. Players in online casinos rarely concern themselves with the physical location of the gaming companies, and are rarely drawn for this reason to visit the host countries. While nations such as Costa Rica and Antigua and Barbuda have thriving tourism industries, these industries are based on their attractive natural environments, resorts, and the like, rather than their use as a base for computer servers for Internet casinos.

# Conclusion

In the case of Bermuda, the potential negative effects of hosting Internet casino companies could outweigh the benefits, and would not likely help achieve the primary goal of reviving the country's tourism industry.

While some tax revenues would accrue to the country, the tax rates that could be achieved while still attracting these companies would likely result in very little net revenues for the government. Further, an online gambling industry in Bermuda would be competing with existing jurisdictions which would exert downward pressure on tax rates.

Regulating this industry has proven very difficult, and the harm that could be caused to the existing financial industries or a burgeoning gaming industry in Bermuda from an online gambling scandal or perceptions of a too-loosely regulated market could prove irreparable. As countries like Antigua and Barbuda have learned, hosting such companies could also seriously impact trade relations with the United States.

Lastly, but most importantly, on-line wagering is not an amenity that draws tourists, particularly the segment of travelers that Bermuda has historically attracted. Therefore, the introduction of Internet casino companies to Bermuda could not be expected to be a catalyst for increased tourism demand.

# **APPENDIX: ONLINE GAMING**

# Online Gaming Sites and Companies

# **Existing Operators**

Some of the world's most popular online casinos are listed below:

#### Sites Accepting U.S.A. Players

- Pokerstars.com
- · Playersonly.com
- Sportsbook poker
- Absolutepoker.com
- Bodoglife
- · Fulltiltpoker.com
- UltimateBet.com
- Rushmorecasino
- Romecasino.com
- ClubUSAcasino.com
- GoldenCasino.com
- · Englishharbour.com
- SuperSlots
- SilverDollar

#### Sites NOT Accepting U.S.A. Players

- 888 / Pacific Poker
- Action Poker Network
- B2B Skins
- Betsson Poker
- Boss Media
- BetCorp
- Crypto
- Empire Holdings
- Everest Poker
- iPoker
- Jetsetpoker
- Kiwi Poker

- Microgaming
- Ongame/Bwin
- PartyGaming
- Paradise Poker
- PKR.com
- Planet Poker
- Poker Champs
- Prima Network
- SunPoker
  - Tribeca Sites
- Wagerlogic

#### **New Market Entrants**

According to published reports Tabcorp is expanding by opening a telephone and online sports book, LUXBET.COM in Australia's Northern Territory. Tabcorp expects Northern Territory corporate bookmakers to generate handle of more than \$4 billion annually.

# Section IV: Tax and Regulatory Review

# INTRODUCTION

The Innovation Group was engaged to provide recommendations on the potential of introducing gaming to the country of Bermuda. The purpose of this aspect of The Innovation Group's report is to evaluate licensing and regulatory guidelines and tax structures for casino gaming in Bermuda. This aspect of the study does not cover Internet gaming or the introduction of a Lottery to Bermuda as prior sections of our study have determined that those forms of gaming ultimately do not meet the goals and objectives of the Bermuda Government and the Bermuda Hotel Association.

Fundamentally implicit to any such discussion is the consideration of the strategic goals and objectives driving the proposed introduction of casino gaming within the jurisdiction; the identification of the operating environment which must be created in order to enable the achievement of the defined objectives; and, the calibration of available policy levers that would be necessary to create the desired environment and stave off unintended negative outcomes.

The Innovation Group understands that the primary goal of introducing casino gaming to Bermuda is based on inducing tourist visitation by offering an activity that is important to a significant portion of the travelling public and which is present in many of Bermuda's competitors for leisure travel. As a result it is expected that this program will induce further hotel development. Secondary goals include the generation of tax revenues to support more robust tourism initiatives.

While this goal mirrors the outcome desired in a number of other gaming jurisdictions, in others the goals have ranged from the creation of employment to the generation of tax revenues. As noted many of these other jurisdictions were dealing with circumstances driving them to chase incremental tax revenues (such as in the U.S. state of New York or as is presently being considered by the governments of Brazil and Mexico). Still others have considered gaming for the purpose of pure economic development, such that the ultimate aim is to create a new industry that will be sustainable in the long-term (for example in states such as Mississippi and Nevada in the U.S.).

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

# Methodology

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

- 1. Define Bermuda's Objectives of Proposed Gaming Legislation;
- 2. Understand the Market Environment Necessary to Meet Stated Objectives;
- 3. Identify Available Policy Tools for creating said environment; and
- 4. Define specific policies from amongst available policy tools to achieve goals within the context of Bermuda's unique set of circumstances.

As noted in the introduction, the primary goal of introducing casino gaming to Bermuda is to induce tourist visitation in an effort to revitalize the tourism industry in the country. We can now proceed to the analysis necessary to address the remaining three items listed above.

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

First, we performed a comparative analysis of global gaming policies. This aspect of our overall study compares and contrasts the tax structures and regulatory mechanisms associated with various casino style and racino<sup>3</sup> gaming jurisdictions throughout the U.S as well as for select markets within the Caribbean, Latin America, Europe, and Asia. The regulatory environment spectrum includes restricted versus unrestricted gaming situations and limited competition versus the free-market approach towards competition. In addition, the study also reviews the efficacy of license fees and other up-front requirements

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

- · Effects of an Unreasonable and/or Unstable Tax Rate;
- Successful Tax Rate Environments;
- Tax Rate vs. Regulatory Environment (Managed vs. Free-Market); and
- Effect on Tourism.

<sup>&</sup>lt;sup>3</sup> A **racino** is a combined race track and casino. In most cases, the gambling is limited to slot machines (sometimes referred to as Video Lottery Terminals, or VLT's), but some locations (particularly within the U.S.) are beginning to include table games.

The continuing global proliferation of casino gaming into new markets and rampant oneupmanship often elicited by casino developers in various jurisdictions continuously changes the "rules of the game" for each new gaming jurisdiction. This dynamic results in enhanced competitive scenarios and the reality of diminished benefits for new entrants compared to historical examples. Such is the reality faced by all Caribbean countries liberalizing gaming laws as part of an attempt to lure more high-end tourists to their shores in an increasingly competitive global tourism market. We believe the perspective presented by reviewing a broad range of examples (not simply a sample limited to the collection of most applicable Bermuda comparables) is the best way to draw experiential insight into our analysis.

In order to identify policy tools available to the government which could be used to shape the development of the industry, we compiled the general lessons to be learned from evidence collected thus far in the analysis. These would answer the question: what should be the guiding considerations for gaming policy formation?

In answering this question, we demonstrate that there are four primary benefits to be derived from the installation of casino gaming in any jurisdiction, as follows:

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

We will expand on these benefits, and describe how the concepts of *profit* and the *capital investment* directly relate to each. Namely, we will explore how the level to which any one, or all of these, can be achieved is directly determined by the level of capital investment in the market, and, indirectly determined by the factors that drive the investment decision (i.e. profitability). While no jurisdiction can control all of the factors to be discussed, many are heavily influenced by the appropriateness of tax and regulatory policies designated by the government.

The heart of this section discusses the tax balancing act; weighing the needs of the governmental entities that would rely on gaming tax revenue with the need for a healthy industry. The analysis shows how the gaming tax structure weighs on profitability thus affecting the amount of capital that is potentially made available for a project.

Bermuda's primary goal of recognizing a sustainable increase in the quality and diversity (and competitiveness) of the tourism product will be shown to be the outcome of an environment which maximizes benefit (#3) the quality of the gaming product for gaming consumers, and benefit (#4) the long term viability of the industry. Thus, policy considerations which impact the realization of these benefits will be emphasized.

Having addressed the general implications our findings have on policy development, we draw these conclusions into the context of our market analysis in order to achieve the fourth and ultimate objective of our study (policy recommendations). Bringing the analysis to a close, we

supply a series of policy recommendations to ensure that Bermuda can achieve its stated goals and objectives with regards to development of a gaming industry.	

# COMPARATIVE ANALYSIS OF GLOBAL GAMING POLICIES

This section of our analysis presents a survey of tax and regulatory policies in select jurisdictions across the globe in order to present a breadth of policy examples which have been applied in a broad range of market contexts. The policy approaches identified herein will be drawn on in the analysis portion of this paper, together with information gathered on policy outcomes (presented in following section of this report) in order to generally define how these policies impact the development of casino gaming in various market contexts; and, also what specific considerations should be made in Bermuda in order to design policies that will enable the country to accomplish its objectives.

This analysis is concerned only with those particular areas of legislation broadly impacting the introduction and evolution of the gaming industry in Bermuda, either affecting the achievement of benefits being sought or the potential for unintended negative outcomes. Thus, while there are areas of these policy topics- specifically in the regulatory arena- which address items such as manner and transparency of day-to-day operations, income reporting standards, staff and equipment certification standards, responsible gaming statutes, etc., such topics are not the focus of this analysis section.

# Structures and Vehicles for Gaming Industry Taxation

The Innovation Group analyzed the gaming tax structures associated with a number of gaming jurisdictions as the first step towards determining the impact of the tax rate structure on the economic benefits and the financial viability of the industry. For the purposes of this analysis we examined various tax structures and numerous vehicles of taxation employed by gaming jurisdictions in the following regions:

- · United States
- Caribbean and Latin America
- Europe

The primary tax structures utilized are:

- · the graduated tax; and
- · the flat tax

Taxation vehicles reviewed in this section include:

- Gaming Revenue Tax
   % of gross gaming revenues levied on owners/operators of casinos
- Admission Fee
   Flat fee administered by the casino operator on behalf of the government for entrance to the gaming facility.

Winnings Tax
 Generally a variable tax applied to the winnings of casino patrons

#### License Fees

License fees are generally collected on a one-time basis in exchange for the right to operate casinos in a given jurisdiction. These differ from annual regulatory and administrative fees in that these one-time license fees represent the value of the right to operate rather than a method of offsetting public sector costs associated with regulation and oversight of the industry. The amount of these fees is commonly determined through a competitive bidding process, though they may also be established legislatively. Up-front license fees can be considered a form of taxation from the operator's perspective as they are usually amortized along with other development costs over a portion of a casino's operating life.

Requirements for Development or Capital Investment In place of an upfront license fee (or possibly in addition to it), the government could impose a minimum level of capital investment or set of specific guidelines regarding the scale and scope of development which would have to be met in return for receiving the right to operate within the jurisdiction. These may be negotiable.

# U.S. Casino Gaming Taxes

The analysis of U.S. jurisdictions was limited to major gaming jurisdictions that exhibit casino or racino style gaming, excluding Native American casinos (Native American casinos are not taxed in the United States). The following discussion analyzes the casino style tax rate structure in Missouri, Indiana, Illinois, Iowa, Colorado, Mississippi, Louisiana, New Jersey, and Nevada and the racino style tax rate structure in Iowa, West Virginia, Delaware, New Mexico, New York, and Florida.

#### Missouri

Missouri levies a flat gaming tax rate of 20% on gaming revenue and a \$2 admission fee. The casinos are also charged a regulatory fee associated with state enforcement agents assigned to each casino, although nominal in comparison to the gaming tax and admission fee. The resulting effective tax rate<sup>4</sup> for Missouri was 27.4% for fiscal year 2007. The tax structure and rates have remained unchanged since the inception of gaming in 1994.

#### Indiana

Indiana utilizes a graduated gaming tax structure with a top rate of 35% for gaming revenue over \$150 million (graduated schedule shown below). The state also imposes a \$3.00 admission fee. The effective tax rate in Indiana was 32.8% in calendar year 2007. In 2002, the tax structure changed from a flat rate of 20% to the current graduated schedule. The graduated structure increased the effective tax rate by about 5%. The impact of the higher effective rate was

<sup>&</sup>lt;sup>4</sup> Effective Tax Rate: The rate a taxpayer would be taxed at if taxing was done at a constant rate, instead of progressively. Effective tax rate is calculated as total tax paid divided by aggregate taxable income.

mitigated almost completely by rule changes which allowed the casinos in Indiana to permanently dock, thus enhancing customer convenience and in turn increasing gaming revenue. The following chart displays the current graduated tax schedule in Indiana:

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

Source: Indiana Gaming Commission

#### Illinois

Illinois also utilizes a graduated gaming tax structure with a top rate of 50% for gaming revenue over \$250 million (graduated schedule shown below). The state also charges a \$3.00 admission fee. The effective tax rate for Illinois was 42.5% in 2007 (calendar year), arguably one of the highest rates in the nation. The tax rate structure in Illinois has been extremely dynamic in recent years, changing a total of four times since 1998. In 1998, Illinois changed from a flat tax rate of 20% to a graduated structure with a top rate of 35% for gaming revenue greater than \$150 million. In June 2002, the top rate increased to 50% for revenue greater than \$200 million. The change also increased the admission fee by \$1. In June 2003, the top rate increased to 70% for gaming revenue over \$250 million, resulting in an effective rate of 46.3% (FY 2004). The admission tax also changed to a graduated schedule with a top rate of \$5. The rates were subsequently rolled back to the June 2002 level in 2005. The following chart displays the current and past graduated tax schedules:

Illinois	Graduated	Structure	History
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January 1998 - June 2002	
Tax Bracket (AGR)	Rate
Less than \$25 million	15.00%
\$25 - \$50 million	20.00%
\$50 - \$75 million	25.00%
\$75 - \$150 million	30.00%
Greater than \$150 million	35.00%
Effective Tax Rate (FY 2002) *	31.10%
June 2002 Increase	12.0
Tax Bracket (AGR)	Rate
Less than \$25 million	15.00%
\$25 - \$50 million	22.50%
\$50 - \$75 million	27.50%
\$75 - \$100 million	32.50%
\$100 - \$150 million	37.50%
\$150 - \$200 million	45.00%
Greater than \$200 million	50.00%
Effective Tax Rate (FY 2003) *	38.00%
June 2003 Increase	214
Tax Bracket (AGR)	Rate
Less than \$25 million	15.00%
\$25 - \$37.5 million	27.50%
\$37.5 - \$50 million	32.50%
\$50 - \$75 million	37.50%
\$75 - \$100 million	45.00%
\$100 - \$250 million	50.00%
Greater than \$250 million	70.00%
Effective Tax Rate (FY 2004) *	46.30%
June 2005 Rollback	
Tax Bracket (AGR)	Rate
Less than \$25 million	15.00%
\$25 - \$50 million	22.50%
\$50 - \$75 million	27.50%
\$75 - \$100 million	32.50%
\$100 - \$150 million	37.50%
\$150 - \$200 million	45.00%
Greater than \$200 million	50.00%
Effective Tax Rate (CY 2006) *	43.20%

Source: Illinois Gaming Board; The Innovation Group

## Iowa

Iowa also utilizes a graduated gaming tax structure although it contains only three tax brackets with a top rate of 22% for gaming revenue over \$3 million (graduated schedule shown below). The structure, in effect, approximates a flat tax with an effective tax rate just under 22% since all

<sup>\*</sup> Includes Admission Fees

the casinos generate gaming revenue well in excess of \$3.0 million. The state also collects a fairly nominal regulatory fee from each casino. The resulting effective tax rate for Iowa was 22.5% in fiscal year 2008, stable in comparison to the prior year. The following chart displays the current graduated tax schedule:

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

Source: Iowa Racing and Gaming Commission

#### Colorado

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

The initial tax rate structure (1991) featured three rate thresholds (tax brackets) with a bottom rate of 4% on gaming revenue less than \$440,000 and a top rate of 15% on revenue greater than \$1.2 million. The current rate structure has six tax brackets with a top rate of 20% on revenue greater than \$15 million. The current tax rate structure has been in place since July 1999 and is as follows:

Colorado Tax Rate Structure		
Tax Bracket (AGP)	Current Rate	
Less than \$2 million	0.25%	
\$2 - \$4 million	2.00%	
\$4 - \$5 million	4.00%	
\$5 - \$10 million	11.00%	
\$10 - \$15 million	16.00%	
Greater than \$15 million	20.00%	

Source: CLGCC

Based on the revenue profile of the Colorado casinos, the resulting effective tax rate for fiscal year 2007 was 14%.

# Mississippi

Mississippi utilizes a graduated gaming tax structure for the state gaming tax and a local government fee. The graduated structure has only three tax brackets as outlined below. The gaming revenue threshold associated with the first two tax brackets is low enough that the effective tax rate in nearly equal to the top tax rate. The top tax rate for the state gaming tax and local government fee is 8% and 0.8%, respectively. The local governments hosting the casinos also collect a flat gaming tax of 3.2%. In summary, the effective tax rate in Mississippi is

roughly 12.0%. The rate has not change since the inception of gaming in 1993. The Mississippi gaming tax structure is outlined below:

Mississippi Gaming Tax Structure

Mississippi Gaining Tax Struc	ture
State Gross Revenue Fees	
First \$50,000 Monthly Gross Revenue	4.00%
Next \$84,000 Monthly Gross Revenue	6.00%
All Monthly Gross Revenue over \$134,000	8.00%
Local Government Fee	
First \$50,000 Monthly Gross Revenue	0.40%
Next \$84,000 Monthly Gross Revenue	0.60%
All Monthly Gross Revenue over \$134,000	0.80%
Local Gaming Tax (flat rate)	3.20%

Source: Mississippi State Tax Commission

#### Louisiana

Louisiana imposes a flat tax of 21.5% on gaming revenue for all riverboats except Bally's. Bally's pays taxes on a graduated schedule at rate of 18.5% for the first \$6 million in gaming revenue during the month, 20.5% on the next \$2 million, and 21.5% on revenue exceeding \$8 million. Bally's, in New Orleans, has since closed as a result of destruction from hurricane Katrina. The effective tax rate on the sole land based casino is approximately 21%, thus the overall effective rate on riverboat/landbased gaming in Louisiana equates to 21.4%. The gaming tax structure has not changed since the inception of gaming.

# New Jersey

The state of New Jersey levies a gaming tax equal to 8% of gross gaming revenue. The casinos pay an additional 1.25% of gross gaming revenue into the casino reinvestment development authority obligation. Therefore, the total effective tax rate for New Jersey was about 9.3% in 2006. The rate environment has been relatively stable since the inception of gaming in the state.

#### Nevada

Nevada imposes various taxes and fees related to gaming including a gaming tax, a slot machine device fee and an entertainment fee. The gaming tax rate is 3.5% on the first \$50,000 in gaming revenue during the month, 4.5% on the next \$84,000, and 6.75% on revenue exceeding \$134,000. Again, due to the low revenue associated with the first two revenue brackets, the effective gaming tax rate of 6.72% roughly approximates the top rate. After taking into consideration the device fee and entertainment fee, the overall effective tax rate for Nevada in fiscal year 2008 was about 7.2%.

# U.S. Racino Gaming Taxes

In the gaming industry, race tracks where casino gaming is allowed are known as racinos.

#### Iowa

In addition to the riverboat casinos, Iowa operates three racinos. The racinos feature Class III machines and can be licensed to offer table games. The tax rate structure for the racinos is almost identical to the riverboat casinos with a couple of exceptions. For racinos that operate in a county with no other licensees, the top rate is 24%. For racinos that have a table game license and generate more than \$100 million in gaming revenue, the top rate is also 24%. Therefore, the effective tax rate for the racinos in fiscal year 2007 was slightly higher than the riverboats at 26.2%.

## West Virginia

West Virginia has four racinos, which are regulated by the West Virginia Lottery Commission. The racinos feature video and reel slot machines. The racetracks in West Virginia have recently been given the right to add table games on passage of a local area referendum approving such additions. This was largely a response to increased competition from Pennsylvania.. The chart below displays information on the West Virginia racinos:

West Virginia Property Characteristics

Track	City	Racino Opened	Machines*	
Charles Town Races	Charles Town	Sep-97		
Mountaineer Racetrack	Chester	Sep-94	3,192	
Tri-State Racetrack	Cross Lanes	Sep-94	1,560	
Wheeling Island Racetrack	Wheeling	Sep-94	2,081	

<sup>\*</sup> Machine counts averages for Jan-Sep 2008

The slot machine revenue, called Gross Terminal Revenue ("GTR"), is impacted by various allocations and then distributed to various pools. GTR is reduced by 4% for administrative costs paid to the lottery commission and a surcharge to arrive at Recalculated Net Terminal Revenue. The surcharge supports track capital investment, with the excess going to the state lottery. Recalculated Net Terminal Revenue is then distributed to the racetracks, lottery fund, purse fund, workers comp / pension fund, a greyhound and thoroughbred development fund, the racing commission, various state programs and the counties and cities.

The effective tax rate against GTR calculated to about 54.5% for FY 2007.

In 2007, legislation was passed permitting table games at racinos in West Virginia. This mandates local option referendums in each of the county's housing racinos.

Hancock County approved the games for Mountaineer Race Track & Gaming Resort, owned by MTR Gaming Group Inc., while Ohio County approved them for Wheeling Island Racetrack and Gaming Center, a subsidiary of New York-based Delaware North, Kanawha County, home of Tri State Racetrack and Gaming Center narrowly passed table games in mid-August 2007. Jefferson County however, rejected table games for Charles Town Races & Slots.

Under the new legislation, the state gets 35% of table game revenue and charges each track a \$2.5-million license fee to operate the games. Meanwhile, the revenue splits in the legislation

have changed; the racing industry gets less. Of the state's share of gaming revenue, purses for Thoroughbred and Greyhound racing get 2.5%, while 2% goes to the respective breed development funds. Meanwhile, pension plans for racetrack employees receives 4%.

#### Delaware

Delaware contains three racetracks, all offering VLTs. The racetracks are Delaware Park, Dover Downs, and Harrington Raceway. The video lottery operations are by statute operated and administered by the Delaware State Lottery Office ("Lottery"). The State of Delaware recently passed legislation that increases the number of machines allowed at each racetrack from 2,500 to 4,000. The operators must pay a fee per machine for each machine over 2,500. The video lottery revenue is distributed as follows:

<b>Revenue Distribution Summary</b>			
State	36.00%		
Racing Purses	11.00%		
Racetracks	48.00%		
Vendor fees	5.00%		
Total	100.00%		

Source: Delaware State Lottery

The resulting effective tax rate calculated to about 46.5% in 2007.

#### New Mexico

New Mexico features racetracks that offer slot machines. Each gaming facility has a virtual monopoly in its market with the exception of Native American facilities. The racinos can operate a maximum of 750 machines. In FY 2007, total gaming revenue reached \$244.3 million. The state imposes a flat gaming tax of 26% of machine revenue. In addition, 20% and 0.25% of machine revenue is distributed to purses and a problem gambling fund, respectively. The effective tax rate (including the purse distribution) was 46.3% in FY 2007 for New Mexico racetracks. The effective rate has been relatively stable over the last several years.

#### New York

New York has eight racino facilities. Win per unit per day for calendar year 2007 averaged \$179. The former tax structure for racinos in New York is shown in the table below. Under this structure, the racetracks kept only 32% of the first \$50 million in VLT revenue, 29% on the next \$100 million, and 26% on gaming revenue greater than \$150 million. In addition, the legislation provided for a "marketing and promotional" payment to the racetrack for 8% on the first \$100 million in VLT revenue and 5% on revenue greater than \$100 million. Promotional payments were limited to 4% in Westchester and Queens Counties. In calendar year 2007, the effective tax rate for New York was 69.6%, the highest in the nation.

New York Distribution of VLT Receipts after Prizes\*

Net Machine Income	Revenues for Education	Lottery Administration Fee	Operator Commission	Promotions
Westchester and Queens Counties	ean.	Co.se	1,460	1.0
Less than \$50 million	54%	10%	32%	4%
Over \$50 million to \$100 million	57%	10%	29%	4%
Over \$100 million to \$150 million	57%	10%	29%	4%
Over \$150 million	60%	10%	26%	4%
Other racetracks				
Less than \$50 million	50%	10%	32%	8%
Over \$50 million to \$100 million	53%	10%	29%	8%
Over \$100 million to \$150 million	56%	10%	29%	5%
Over \$150 million	59%	10%	26%	5%

Source: New York Budget Department, 2007-2008 Executive Budget Economic Review and Outlook

Recognizing that the high tax rates were stymicing investment in the tracks and creating serious financial difficulties especially for the smaller tracks, the legislature once again has revisited the issue and passed bill S3830 in February of 2008 (effective April, 2008). The purpose of S3830 was to increase the VLT vendor fee under certain limited conditions. Vendor fees would be increased as follows for VLT vendors:

- ➤ For VLT vendors with less than 1,100 machines, the rate would increase from 32% to 36% for the first \$50 million received in revenue by such facility.
- ➤ For VLT vendors with more than 1,100 machines, the rate would remain the same at 32% for the first \$50 million received in revenue by such facility.
- For VLT vendors located in an area with a population of less than one million people within a 40-mile radius, the rate would be 40% for the first \$50 million annually.
- For VLT vendors located within 15 miles of an Indian Casino, the rate would be 42% for the first \$50 million in revenue received for the first five years and then decrease to 40%.
- ➤ Should an Indian casino be located within 15 miles of a VLT vendor after the effective date of this act, the vendor fee would increase to 42% for the first five years and then be reduced to 40%.
- VLT vendors became eligible for an additional fee of up to 4% of the first \$62.5 million of VLT revenue to be used exclusively for capital investments that enhance the VLT facility, such as hotels, dining, entertainment, and retail facilities, or other improvements that enhance facility amenities. Such capital expenditures must be approved by the Division of the Lottery, in consultation with the Racing and Wagering Board. Such capital investment revenue shall be limited to an annual amount of \$2.5 million and an aggregate amount of \$20 million over the period of eight years per gaming facility. This provision expires in eight years after it becomes law. In addition, the marketing fee would increase from 8% to 10% for the first \$100 million and then be reduced to 8% for monies collected thereafter. Further, the marketing fee for Aqueduct and Yonkers increased from 4% to 8%.

<sup>\*</sup> Not less than 90 percent of sales must be used for prizes, Net Machine Income is gross receipts minus prize payments

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

## Pennsylvania

The tax structure for the racinos in Pennsylvania includes a 34% gaming tax for local property tax relief, a 4% gaming tax for local governments, a 5% gaming tax for statewide economic development and a 12% gaming tax for a horsemen fund to support racing purses. The Innovation Group understands that the racetracks currently contribute a maximum of 12% of gross terminal revenues towards the horsemen fund, but this amount may change once non-racetrack facilities begin contributing to the pool. It was estimated that stand-alone facilities would contribute approximately 9% of gross terminal revenue. Therefore, the effective tax rate for racetracks was estimated at about 55%. In addition, each licensee was required to pay an initial \$50 million licensing fee. Each facility will be allowed between 1,500 and 3,000 slot machines, with the ability to apply for 2,000 more machines after six months of operation. Each of the resort facilities would pay a \$5 million licensing fee and are allowed to offer up to 500 slots machines.

#### Florida

The Florida Legislature passed an amendment to tax slot machine revenues and requires that those taxes supplement public education statewide. Referenda were held on March 8, 2005 and were approved for the four pari-mutuel facilities in Broward County. Gulfstream Park opened on November 15, 2006 with 516 slots and Mardi Gras Racetrack opened on December 28, 2006 with 1,147 slots. Since then, slots have been approved in Miami Dade County, although no facilities are up and running at this point. Gross gaming revenues are taxed at 50%, with 3% to local governments. Purses are then negotiated between the horsemen and the tracks, with any purse supplement coming from the tracks share of slot revenue, leading to a further loss in operating income for the existing tracks. In the Miami-Dade/Broward County area, these facilities are subject to competition from Native American tribes which have historically paid no taxes and therefore been able to make substantial investments in facilities, marketing, and player development.

#### Kansas

In late April 2007, Senate Bill 66 ("SB66") was signed into law allowing the state to facilitate the development of various destination casinos and Kansas racetracks to offer a limited number of slot machines.

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

The tax rate on gaming revenue was set at 27% for destination casinos; with 40%, 3% and 2% going to the state, local government, and problem gambling fund, respectively. State revenues would be deposited in the Expanded Lottery Act Revenues Fund, designated for the reduction of state debt, state infrastructure improvements (i.e. deferred maintenance at public universities) and local government property tax relief. The legislation dictates that 15-year contracts would be signed with the casino management company.

The racino gaming revenue would be divided as follows.

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

Source: Legislative Summary

Under that bill, the three existing racetrack license holders, including The Woodlands in Kansas City, the Wichita Greyhound Park in Valley Center (near Wichita), and Camptown Racetrack in Frontenac, would divide 2,200 slot machines, although the exact distribution is uncertain. An additional 600 slot machines would be available through an auction process selling licensing rights at a starting bid of \$2,500 per machine.

Both the Woodlands and Wichita Greyhound have since closed—Wichita's casino rights vetoed away by the county in which it resides, and the Woodlands failing to reach agreement with the state Lottery on a re-working of the above tax distribution which it felt prohibitive to profitable operation within the market. Thus, racinos are not in Kansas' immediate future. Though these facilities have closed, their licenses are still valid and a reworking of the effective tax rates (now at 75% may rekindle any or all of discussions between facility owners and the state.

## Maryland

In November 2007, Maryland Government officials passed House Bill 4 (HB4), allowing a referendum on the legalization of Video Lottery Terminals (VLTs) with the primary purpose for providing funds for public education. The amendment permits the issuance of five video lottery licenses and the operation of 15,000 slot video lottery terminals in predetermined locations. The following is a list of the locations, the number of terminals allowed and other specified stipulations.

Maryland Operator License Location	Mary	land (	)perator	license	Locations
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Location	# Units	Stipulations
Ann Arundel County	4750	Within two miles of MD Route 295

Baltimore City	3750	In a non-residential area within ½ mile of MD Rt. 295 on property owned by the City on date of application for VLT operator license
Cecile County	2500	Within two miles of Interstate 95
Allegany County	1500	Located within the Rocky Gap State Park
Worchester County	2500	Within one mile of the intersection of Route 50 and Route 589

Source: Maryland House Bill 4

An initial license fee of \$3,000,000 for every 500 video lottery terminals is required and must be paid at the time of the application. In addition, bidders must exhibit a \$25,000,000 direct investment by the applicant for construction and related costs for each 500 video lottery terminals included in the bid. There is also an annual fee of \$42 per video lottery terminal. The Maryland tax rate is set at 67% of gaming revenue. Funds generated by the state are anticipated to be distributed as follows:

**Maryland Tax Revenue Distribution** 

Mai yiana Tax Revenue Distribution	**
Education Trust Fund	48.50%
Horse racing purses*	7.00%
Local impact grants	5.50%
Racetrack facility renewal account **	2.50%
Lottery agency for costs	2.00%
Small, Minority and Women-Owned Businesses Account	1.50%
Total	67%

Source: Maryland Education Trust Fund - VLTs

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

## Summary

The effective tax rates for the casino segment (as a percent of gross gaming revenue) ranged from a low of 7.2% for Nevada to a high of 42.5% for Illinois. The weighted average rate for the group is 15.8%, although heavily weighted towards Nevada and New Jersey due to the magnitude of gaming in these jurisdictions. The simple average for the group (equal weighting) calculates to 21.2%. The following chart summarizes the effective tax rate analysis for the casino style segment and ranks the gaming jurisdictions from lowest to highest:

## Effective Tax Rate Summary - Casino Style

<sup>\*</sup>For the Horse racing purses, funds are not to exceed \$100,000,000 annually

<sup>\*\*</sup>For Racetrack facilities, funds are not to exceed \$40,000,000 annually for the first 8 years

	Period	Gaming Taxes & Fees (\$ millions)	Gaming Revenue (\$ millions)	Effective Tax Rate
Nevada	FY 2008	898	12,501	7.18%
New Jersey	CY 2007	455	4,921	9.25%
Mississippi	FY 2008	345	2,837	12.15%
Colorado	FY 2007	112	799	14.02%
Louisiana	FY 2007	467	2,181	21.41%
lowa	FY 2008	214	952	22.49%
Missouri	CY 2007	436	1,592	27.40%
Indiana	CY 2007	860	2,625	32.76%
Illinois	CY 2007	843	1,983	42.50%
Total / Average		4,745	29,950	15.84%

Source: Gaming Commission Web Sites; The Innovation Group

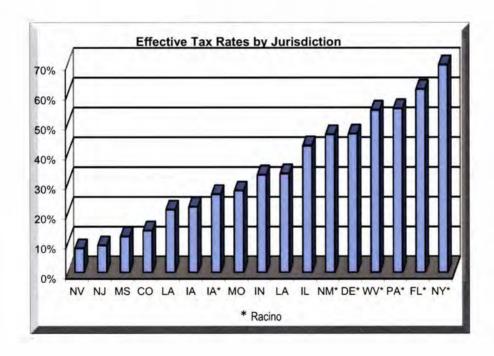
The effective tax rates (as a percent of gross gaming win) for the racino segment range from a low of 26.2% for Iowa to a high of 69.6% for New York (prior to most recent changes to revenue distribution which are discussed in this report). Today, out of the roughly 30% of revenues the tracks retain in New York approximately 10% goes to the horsemen leaving the tracks with 20%. This would imply that the comparative burden on New York racinos actually closer to 80%. New York has the highest effective tax rate in the nation. The weighted average for the group was about 53%. The simple average for the group (equal weighting) calculated to 49%.

Effective Tax Rate Summary - Racino Style

	Period	Gaming Taxes & Fees (\$ millions)	Purses / Other (\$ millions)	Subtotal Distributions (\$ millions)	Gaming Revenue (\$ millions)	Effective Tax Rate
lowa	FY 2007	109.9	9.5	119.4	455.2	26.24%
Maine	FY 2007	16.8	3.8	20.6	43.3	47.61%
New York	FY 2007	449.9	126.8	576.7	828.2	69.64%
Delaware	FY 2007	216.6	67.9	284.5	612.4	46.46%
West Virginia	FY 2007	444.4	85.7	530.1	972.6	54.50%
Indiana	FY 2008	6.5	3.9	10.5	26	40.13%
Florida*	CY 2007	109.4	15.2	124.6	202.5	61.50%
Pennsylvania	FY 2008	604	168.6	772.6	1,404.80	55.00%
Oklahoma	CY 2007	10.2	22	32.2	78.7	40.86%
New Mexico	FY 2007	64.1	48.9	113	244.3	46.25%
Total / Average		2,031.80	552.3	2,584.10	4,868.00	53.08%

Source: Gaming Commission Web Sites; The Innovation Group \* 3% local tax and an estimated 7.5% purse supplement

The following chart shows the effective tax rate by jurisdiction.



## Caribbean and Latin America Gaming Taxes

The analysis of Caribbean and Latin American Jurisdictions was limited to major gaming jurisdictions that exhibit casino style gaming (with the exception of Jamaica where only slots are presently permitted).

This section will show that Caribbean and Latin American jurisdictions utilize the same vehicles of taxation, and even generally the same range of rate structures as witnessed in the U.S. Ultimately, however, we find through subsequent components of this analysis that the market outcomes in many of these have proven substantially different from what is seen in the U.S. jurisdictions, which indicates the existence of additional forces that impact how any given gaming environment will develop.

While subsequent sections of analysis will address these forces in detail, drawing on relevant examples from amongst these and other jurisdictions, the following discussion is intended to simply delineate the slot parlor/casino style tax rate structure in a range of countries in this region. Specifically, these are identified for The Bahamas, Aruba, the Dominican Republic, Puerto Rico, Jamaica, Turks and Caicos Islands, U.S. Virgin Islands (St. Croix), Panama, Peru and Chile.

#### Bahamas

The Government of the Bahamas combines a basic flat tax based on casino floor space with a graduated gaming tax structure with a top rate of 25% for gaming revenue under \$10 million. The following chart displays the current tax schedule for gaming operations in the Bahamas.

#### **Bahamas Gaming Taxes**

BASIC FLAT TAX	
Basic tax payable in respect of a casino with a floor space of less than five thousand square feet	\$50,000
Basic tax payable in respect of a casino with a floor space of not less than five thousand square feet but less than ten thousand square feet	\$100,000
Basic tax payable in respect of any other casino	\$200,000
WINNINGS TAX	
Winnings tax payable in respect of a casino with a floor space of less than ten thousand square feet-	
On gross winnings up to and including \$10M	10%
On gross winnings in excess of \$10M	15%
Winnings tax payable in respect of any other casino-	
On gross winnings up to and including \$10M	25%
On gross winnings in excess of \$10M up to and including \$16M	20%
On gross winnings in excess of \$16M up to and including \$20M	10%
On gross winnings in excess of \$20M	5%

Source: Bahamas Gaming Commission

The graduated tax rates as defined result in higher performing facilities benefitting from lower effective tax rates. This reflects the inverse of the typical scale utilized in the U.S. which applies higher rates to higher performers. This system rewards larger investment and thus encourages large-scale development, however it results in smaller gaming tax collections and would likely preclude the development of smaller amenity-type facilities or limit the likelihood of incremental investment in those that did materialize. Poor performers may also be penalized unfairly.

Examples of both negative situations are available for the Bahamas:

- Disappointed by the level of recent tax collections the government of the Bahamas has begun considering opening gaming to the local population, specifically as a method of increasing gaming tax revenues.
- One of the Bahamas premier resort destinations, Our Lucaya is located in Freeport on Grand Bahama Island at the Starwood Westin and Sheraton Our Lucaya Beach, Golf and Casino Resort. The 372 acre resort complex is comprised of two hotels, with a combined total of 1,299 rooms and suites. The resort contains two golf courses, a 25,000-squarefoot spa and fitness center, and four pools and spa tubs. The complex also offers 14 different restaurants and cafés. The casino features 400 slot machines and 33 table games including roulette, blackjack, craps, three-card poker, Caribbean stud and mini-baccarat. Despite the impressive scope of the facility, the Isle Our Lucaya failed to perform up to ownership expectations, and the higher tax burden resulting from lower performance coupled with exorbitant rent resulted in net losses at the facility such that management requested to be let go from the operating agreement just 2 years after commencing operations. The closure of Our Lucaya would have represented a loss in benefits provided by the existence of the property had the government not stepped in and renegotiated a more favorable tax situation for the operator.

It is not uncommon in the Bahamas to see modified tax arrangements in license agreements with individual properties, as three of the four facilities on the islands are presently receiving some type of tax concession from the government. These have been offered for a range of purposes from incentivizing large investments (as for the \$1 billion Atlantis Phase III expansion) to aiding ailing operations thought to provide economic benefit to the island (as with Isle of Capri's Our Lucaya operation on Grand Bahama). Collectively these concessions result in an effective tax rate significantly lower than would be implied by the previously shown schedule. According to an article in the BAHAMA JOURNAL (June 11th, 2008), between March 2007 and February 2008, the government collected \$15,577,746 in gaming taxes from the 4 casinos operating across the Commonwealth of the Bahamas. The Bahamas Gaming Board reported gaming revenues of \$225.5 million generated by those properties over the same period. Thus, the effective tax rate in the Bahamas was 6.9% in fiscal year 2008.

#### Aruba

Aruba is a popular spot for junket<sup>5</sup> players as the casinos are mostly located in large island resort hotels. The 10 casinos across the island of Aruba offer approximately 3,200 slots, 210 tables, and sports betting. There is no direct tax on gaming win, but each casino facility is subject to a nominal flat tax of \$2,793 per month plus a variable tax of 2% tax on drop<sup>6</sup>, which is equivalent of 17% to 20% tax on net gaming wins.

The government of Aruba collected \$15.8 million from the 2% tax on drop for the 12 months ended November 2008 (the most recent data available at the time this report was generated). Aruba does not publish gaming revenues for its facilities, but based on tax collections we can infer that the country's casinos generated between \$79 million and \$93 million in gaming win over the same 12 month period. Considering the potential applicability of Aruba's hotel-based installation of gaming to Bermuda's situation, the table below provides a profile of the island's 10 casinos.

<sup>6</sup> Drop is a casino accounting term which refers to all cash and cash equivalents exchanged for chips and (if played) risked against the casino; player's bankroll.

<sup>&</sup>lt;sup>5</sup> A casino junket is a group of individuals that have a propensity (and generally high budget) for gaming that are being organized by a tour leader-- referred to as a junket rep-- to take them on an organized trip to a casino for gaming purposes.

**Aruba Casino Properties** 

	Location	Slots	Tables	Positions
Key Largo Casino	Eagle beach	94	10	164
Alhambra Casino	Orenjestad	347	18	473
Radisson Aruba	Orenjestad	239	29	442
Cool Casino @ the Riu Palace	Orenjestad	200	13	291
Crystal Casino at the Aruba Renaissance	Orenjestad	785	33	1016
Stellaris Casino at the Aruba Marriott	Palm Beach	470	30	680
Casablanca Casino @ the Westin Aruba	Palm Beach	312	23	473
Excelsior Casino @ the Holiday Inn	Palm Beach	257	16	369
Copa Cabana Casino @ Hyatt Regency	Palm Beach	250	21	397
Occidental Grand Casino	Palm Beach	250	14	348
Totals		3,204	207	4,653

Source: Operator Web Sites

## Dominican Republic

Law 2906 mandated that casinos were to be assessed monthly taxes per gaming position in operation. Those casinos with one to 15 tables pay US\$634 a month for each table, those from 16 to 35 tables pay US\$730 each and those with more than 36 pay US\$825 a month. Regardless of the number of slot positions operating in the casino, ownership is assessed a monthly tax of US\$120 per device.

Additionally, the Internal Tax Department assesses a 15% levy on prizes claimed by the public for benefits obtained in lotteries, "loto quiz", electronic games, bingos, horse races, casinos, or any kind of prize offered through promotional campaigns.

While the Dominican Republic does not publish gaming revenue or tax income data, a 2007 Innovation Group assessment of 10 facilities within the Santo Domingo market area (representing 1,095 slots and 167 tables) enabled us to deduce an effective tax rate of 21.2% based on an estimated \$49.7 million in gross gaming revenues at these facilities.

#### Puerto Rico

The most recent revision in the rules governing distribution of slot win between the operator and the government occurred as the result of a 1997 change in gaming legislation enacted over the period between 1997 and 2001. With this change, operators presently keep 40% of all slots revenues. Prior to the change, operators kept only 10% of revenues, which precluded any significant development of slots at the facilities. The more operator-friendly 40/60 revenue split induced a change in the number of slot machines in operation with operators investing heavily in adding more slot machines to their facilities.

Though it varies somewhat from year to year, table games are estimated to contribute approximately 18% of all casino gaming revenues in Puerto Rico, thus the blended effective tax rate on total gaming revenue attributable to the slots-only revenue sharing is equivalent to 49.2%.

The operation of video lottery terminals at Puerto Rican off-track betting facilities is permissible. The VLT law allocates 15% of the net win from VLTs to the respective off-track betting agencies, and contributes another 15% to purses at El Camarero (formerly El Comandante). The balance is split between the VLT operator and the racetrack operator.

#### Jamaica

Currently, Jamaica does not have any full-scale casinos. There are, however, a number of small slots-only facilities located in major cities and on tourist resorts. The small facilities located on resorts are typically designated for guest-only play. In 2007, the Jamaican gaming environment consisted of approximately 1,200 operators with less than 20 machines, and around 14 gaming lounges that were licensed to have between 20 and 150 VLTs.

Similar to Bermuda, the government is presently in the process of reconfiguring gaming laws to attract large-scale gaming resorts that would have the potential to enhance the country's competitiveness in the tourism arena. Jamaica's Betting, Gaming and Lottery Commission ("BGLC") noted in its submission to parliament for the fiscal year that ended on March 31, 2008 that the expected arrival of mega gaming lounges would provide continued growth in the gaming sub-sector. Upon completion of the regulatory framework, the necessary legislation will be developed and submitted to Parliament for consideration and approval. The government assigned a team to establish and recommend the appropriate framework and tax regime to govern the operation of the new mega-lounge operations. The proposed licensing scheme will be restricted to large-scale resort developments, with over 1,000 rooms and capital investment of at least \$1.5bn. Potential tax rates have not yet been disclosed to the public.

Under the current slots-only law, operators of both ambient machines (those facilities with less than 20 machines) and gaming lounges incurred a total annual assessment of \$169 per machine (\$141 per machine is paid to the Collector of Taxes for every year the machine is operable and accessible by patrons, while \$35 per machine is paid to the BGLC for annual licensing and registration fees).

According to the Jamaica Observer on May 7, 2007 in "Jamaica Resort Considers Vegas Model," the overall Jamaican gaming environment is estimated to generate nearly \$280 million in revenue annually. A similar annual revenue estimate of nearly US\$280 million annually was provided on the Jamaica Information Service website.

In fiscal year 2007, the BGLC reported incomes of US \$514,287 on license and registration fees for gaming machines, implying the registration of 14,568 gaming machines throughout the country. While detailed income records were not available from the Jamaica's Tax Administration in reference to gaming machines, the efficient collection of the \$141 annual levy from 14,568 registered machines would yield just over \$2 million in income for the government. Considering the collective effects of these two levies, the effective tax imposed on the operation of gaming machines is equivalent to 0.91%.

## US Virgin Islands- St. Croix

Casino gaming taxes for the first two years of operation are calculated as 8% of gross gaming revenues, or casino win. This tax rate increases to 10% for the third and fourth year of operation, and increases to 12% for each subsequent year. These tax rates may not be reduced when or if the casino is sold or transferred to a new licensee or owner. Gross revenues from the casino are exempt from the Territory's gross receipts tax.

Additionally, slot machines are taxed at an annual fee of \$250 per machine. Nominal license fees and permits are also imposed upon key employee positions, standard employee positions, service industries, junkets, and the permission to sell alcohol.

#### Turks & Caicos

The government of Turks & Caicos utilizes several taxing vehicles. A flat tax of 30% is imposed against slot machine gaming revenue. In addition, each casino pays a gaming tax against table gaming revenue per the schedule outlined below:

Gaming Tax Structure				
Rate				
2.5%				
5.0%				
7.5%				
15.0%				

Source: Casinos Ordinance (Page 37)

Further, each casino pays a flat fee, called the Basic Tax, of \$150,000 per year. Finally, each casino pays a Profits Tax on the gross gaming revenue associated with slot machines. The slot tax rate is currently set at 5% per the First Schedule contained in the Casinos Ordinance. Official revenue data is not available for the Turks and Caicos market. Per the schedule above, a casino earning 65% of its revenues from slots and over \$3.75 million in table revenues would have an effective tax rate of 38.5%, with the most likely range for all facilities falling between 34.25% and 40%.

#### Panama

The Republic of Panama levies a gaming tax equal to 10% of gross gaming revenue for slot parlors and complete casino operations. These operations also pay a nominal "Key Right" fee determined individually for each property on an annual basis, though it represents an insubstantial portion of total payments made to the state. The effective tax rate for the Republic of Panama including the annual Key Rights payment is estimated at 10.2%. The rate environment has remained the same since the 1998 inception of privatized gaming in the country.

#### Chile

Tax specifications are contained in the Law #19.995 for the 17 new casino licenses issued in 2005—which were intended to act as a catalyst to the growth of domestic and international tourism for the country. A fixed tax rate equivalent to 7% of a monthly tax unit (a monthly tax unit equals CLP\$31,444 or approximately US \$49.56 at current exchange rates – 7% of which is

\$3.47) is applied for every individual that enters the gambling parlors or casinos. Also, a variable casino tax of 20% is applied to the company's gross gaming revenues. The casino tax is applied on a basis that first discounts the Value Added Tax (VAT) burden imposed on all Chilean businesses. Considering the 19% VAT, the effective variable casino tax rate is 16.2%

When fully operational, the 17 new gaming venues are anticipated to generate approximately \$250 million in gross gaming revenues. Just four of the casinos licensed under the 2005 legislation have commenced operations. The rest are scheduled to open by the end of 2010. The Superintendent of Casinos reported that over the first 9 months of 2008, the 4 operating casinos reported combined revenues of \$3,365,686. Over the same period, \$1,015,330 was paid in gaming taxes and entrance fees for an effective tax rate of 30.2%. It is important to note that two of these properties had less than three months of operating history at the time this report was authored.

#### Peru

Peru imposes a flat tax of 12% on gross gaming revenue for its casinos and slots-only game rooms. The gaming tax structure and regulatory situation was overhauled in early 2007. Formerly, taxes were assessed on net income basis for gaming operations registered with the gaming authority. Prior to the change, only 89% of the country's 930 slot-rooms were registered with the gaming authority and legally licensed to operate. Peruvian municipalities had agreed to work together with the Ministry of Tourism (MINCETUR) to gain control of an essentially black market under a facility presented in law 28.945, passed on December 24, 2006. The law essentially provided a one-time offer to all operators of Peruvian casinos and slot houses. Under this plan they should obtain authorization from MINCETUR through the designated registration process and agree to pay taxes or get shut down. Subsequently, 771 applications were submitted by 246 companies to formalize their position in the industry prior to the deadline. At present, just over 50% of these operations have been formalized.

## Summary

The effective tax rates for the casino segment ranged from a low of 6.9% for the Bahamas to a high of 49.2% for Puerto Rico. The following chart summarizes the effective tax rate analysis for the casino style segment and ranks the gaming jurisdictions from lowest to highest:

#### Caribbean and Latin America Effective Tax Rates

Jurisdiction	Effective Tax Rate		
Bahamas	6.90%		
Jamaica*	TBD		
Panama	10.20%		
Peru	12%		
St. Croix	15% - 17%		
Aruba	17% - 20%		
Dominican Republic	21.20%		
Chile	30.20%		
Turks and Caicos	38.50%		
Puerto Rico	49.20%		

<sup>\*</sup>Legislation has not yet been publically proposed:

## European Gaming Taxes

The analysis of European Jurisdictions was limited to major gaming jurisdictions that exhibit casino style gaming. Also addressed in subsequent sections, are experiences in these markets that provide insight for the development of gaming in Bermuda. The following discussion analyzes the slot parlor/casino style tax rate structure in the United Kingdom and Monaco.

## United Kingdom

The U.K. utilizes a graduated gaming tax structure with a top rate of 50% for gaming revenue over £10.4 million (USD \$14.9 million using the January, 2009 exchange rate). The effective tax rate in the U.K was 25.5% in Fiscal Year 2008. The following chart displays the current graduated tax schedule in the U.K.:

U.K. Graduated Tax Schedule

Portion of gross gaming revenues to which rate applies	Rate
The first £ 1,911,000	15 %
The next £ 1,317,000	20 %
The next £ 2,307,000	30 %
The next £ 4,869,500	40 %
The remainder	50 %

The graduated tax schedule was adjusted upward to the current graduated schedule in April of '07. The new structure increased the effective tax rate by about 36% (as witnessed in the table below). The impact of the higher rate has proven detrimental to the overall health of the gaming industry in the U.K., as will be elaborated on in a case study presented in the *Outcomes* section of this report.

Effects of 4/07 Change to Graduated Tax Rate

	Win (£)	Tax (£)	Effective Tax Rate
FY 06/07	712,129,276	133,871,000	18.8%
FY 07/08	656,558,844	167,683,309	25.5%

History of Graduated Gaming Tax Schedules in U.K. Since 1998

Date of Change	2.5% of first £	12.5% of next £	first 15% £	20% of next £	30% of next £	40% of next	50% of remainder £
04.98	450,000	1,000,000		1,000,000	1,750,000		
04.99	462,500	1,027,500		1,027,500	1,798,500		
04.00	470,500	1,045,500		1,045,500	1,830,000		
04.01	484,500	1,076,000		1,076,000	1,883,500		
04.02	488,000	1,083,500		1,083,500	1,897,000		
04.03	502,500	1,115,500		1,115,500	1,953,000		
04.04	516,500	1,146,500		1,146,500	2,007,500		
04.05	534,500	1,186,500		1,186,500	2,078,000		
04.06	546,500	1,212,500		1,212,500	2,124,000		
New Duty Bands	457	21.47			reducións		
04.07		_	1,836,500	1,266,000	2,217,500	4,680,000.0	

#### Monaco

The first casino in Monte Carlo was established in 1863 through a deal with Monaco's ruling family. Since then, Monte Carlo has made itself into the most alluring and luxurious of all gaming environments. The country's single gaming license is owned and by Societe des Bains de Mer, which is in turn 70% state-owned.

Monaco utilizes a flat tax of 13% on its casinos. The low rate can largely be explained by the fact that majority ownership rests in the state itself. In 2013, this tax rate will increase to 15%, then to 17% by 2021.

## License Fees and Other Up-Front Requirements

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

To date, multimillion dollar gaming licenses are levied in Pennsylvania (where an indefinite slot license costs \$50 million) and in Indiana there is a \$250 million license fee. The state of Maryland imposes an initial license fee of \$3,000,000 for every 500 video lottery terminals at the time of the application. The developers of Casino Lisboa in Lisbon, Portugal paid a fee of  $\in$  30 million (USD \$37 million at the time of opening in June, 2006) for a 15-year concession. The collective price-tag for the land associated with two 30-year resort-casino concessions in Singapore was approximately S\$1.8 billion (USD \$1.19 billion) for properties expected to collectively generate between USD \$2.5-3 billion per annum. It is important to note that the land was being sold by the government and effectively represented the fee for the concession itself. In return for the investment, the government included a variety of enticements, including a comparatively low 15 percent tax on revenues and assurances that it will allow no additional casinos into the country for at least 10 years.

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

In Chile, 15 licenses (to which no fee was attached) were distributed for geographic areas across the country (which excluded the Capital region) in an elaborate and highly competitive bid process meant to increase the attractiveness of secondary cities to tourists, as well as generate new tax revenues at the federal and local levels. The government based their decision on criteria such as the likely impact of the proposal on tourism in the region in question, size and scope of non-gaming amenities, and the quality of the casino project itself. While the development minimum was not explicit, the participation of major international gaming firms in the bid process ensured all participants would attempt to maximize investment plans in order to win the bid.

Uruguay recently conducted a similarly competitive process for a 30-year concession to redevelop and operate the historic hotel Casino Carrasco in Montevideo which emphasized

redeveloping the "grandeur and glory" of the property as an "icon of the city" and major tourist attraction first, and a hotel and casino resort second. Again, no fee was tied to this license.

Singapore is an interesting case, its circumstances generated via the estimated \$2.5-3 billion in annual gaming market potential. As previously discussed, the government was able to solicit investors willing to collectively pay over \$1 billion in upfront fees for 2 individual 30-year operating concessions. Additionally, Singapore has the unique geographical advantage of being perceived as a highly competitive location for the attraction of Asian gaming demand. So attractive are these opportunities, that Singapore was able to conduct a highly competitive bid process for their two gaming opportunities. At least 5 investment groups, most of which included the largest and most established names in global gaming industry, were vying not only to pay the concession fees but pledging upwards of \$3-\$4 billion in development projects at their sites. Singapore's RFP outlined a small number of technical requirements relating to the possible sites, but presented only the following in terms of an investment guideline for one of the opportunities:

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

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

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

# REGULATORY MECHANISMS APPLIED TO THE GAMING INDUSTRY

When establishing a tax rate structure, it is important to consider the gaming regulatory environment in which the casinos or racinos operate. The regulatory environment dictates to some extent the revenue and profit potential of the individual casinos, and thus the tax burden that the casinos can reasonably tolerate. The two major regulatory variables that affect gaming revenue are:

- 1. Restrictions on Gaming
- 2. Level of Competition

## Restrictions on Gaming

The regulatory environment often puts restrictions on gaming. For every restriction placed on a gaming operation there will be an adverse effect on the revenue potential of the operation. The most common examples include the following:

- Bet Limit Sets a maximum amount for a single wager.
- Buy-in Limit Sets the maximum that a gamer can obtain in chips or tokens over a specified period of time.
- Quantity Limit Limits the quantity of a particular game type that a casino can offer.
- Limits on the Types of Games Prohibits certain game types, such as Craps, Roulette or other traditional table games.

A bet limit, until recently featured in Colorado, in effect, constrains the amount waged by a gamer per trip. In addition, the bet limit eliminates the entire high-end table gamer segment, as these patrons would opt to travel to an alternative gaming jurisdiction.

A buy-in limit, relevant to Missouri, also restricts high-end play and generally slows down the pace of play due to the regulatory controls necessary to enforce the limit.

Several jurisdictions, including Illinois and West Virginia, impose a quantity limit on machines. This quantity limit often results in capacity issues during peak times as well as impacting the variety of slots on the casino floor. With a limited number of positions, gaming operators often scale back on promotions, as fewer patrons are needed to fill the casino.

Limits on the types of games are prevalent mainly in slots only environments that prohibit table games, often associated with racinos. Revenue potential is adversely impacted as studies have shown that gamers enjoy a variety of game types. A comprehensive survey conducted by The Innovation Group in conjunction with Yesawich, Pepperdine, Brown and Russell titled "The Portrait of the American Gambler", found that 29% of gamers prefer table games. Nevada, at the other end of the spectrum, puts virtually no limits on games, even allowing sports / race book betting among other rare games.

Other restrictions which generally will adversely impact gaming revenue potential include the following:

- Limiting casino hours of operation;
- · Restricting the access of local residents to the gaming floor;
- · Limiting the level of credit a casino can provide a gaming patron; and
- Limiting the ability of gaming patrons to smoke via a smoking ban on the gaming floor.
- · Limiting alcohol sales or giveaways.

Often, restrictions such as these are placed in legislation as a means of placating various antigaming factions. However, restrictive environments do not facilitate the generation of a competitive and sustainable industry in the long term. Cited benefits of any proposed restrictions should always be carefully considered and weighed against their negative impacts on the industry and ultimately government objectives associated with creating a healthy industry.

## Level of Competition

The level of competition is often managed by the gaming laws of the state or the regulatory authority in charge of gaming. When more competitive situations are permitted, regulatory and oversight bureaucracy must be larger and processes more complex if they are to effectively monitor and control the industry.

The level of competition in a gaming market will also impact the revenue and profit potential of the individual casinos. A higher level of competition restricts gaming revenue potential on an individual licensee basis. Operating costs may also be driven up in more competitive environments due to competition for employees and customers amongst operators. The combined marginalization of revenue potential and incremental expense burden posed by this situation ultimately leads to inefficiency and, in extreme cases, distressed situations.

The two major approaches employed by regulatory authorities regarding competition are:

- Free-market Market forces determine the number of casinos. The level of competition is extremely high.
- Managed Market Regulatory authorities manage the level of competition either by law or by policy. The level of competition is typically much lower in comparison to the freemarket states.

## Public vs. Private Industry

While it is not common, some governments opt to maintain a direct involvement in the gaming industry through state ownership and even management of casino operations within their jurisdiction. A later section will examine the efficacy of such a model as compared to the more common private sector scenario.

## Examples - U.S. Regulatory Environments

The following chart highlights the regulatory environment variables for the traditional casino style and racino jurisdictions in the US:

U.S. Regulatory Gaming Environment

		Restriction	Level of C	ompetition		
	Bet Limit	Buy-in Limit	Quantity Limit	Limit on Game Types	Approach	# of Casinos
Casino Style:	200					
Colorado	Yes	No	No	Yes	Free-market	46
lowa	No	No	No	No	Managed	10
Missouri	No	Yes	No	No	Managed	11
Mississippi	No	No	No	No	Free-market	29
New Jersey	No	No	No	No	Free-market	13
Illinois	No	No	Yes	No	Managed	9
Indiana	No	No	No	No	Managed	10
Louisiana	No	No	No	No	Managed	14
Nevada	No	No	No	No	Free-market	268
Racino Style:						
lowa	No	No	No	No	Managed	3
West Virginia	No	No	Yes	Yes	Managed	4
Delaware	No	No	Yes	Yes	Managed	3
New Mexico	No	No	Yes	Yes	Managed	5
Pennsylvania	No	No	Yes	Yes	Managed	4
New York	No	No	Yes	Yes	Managed	8
Florida	No	No	Yes	Yes	Managed	4*

Source: The Innovation Group

<sup>\*</sup> Number approved, not necessarily in operation

# REVIEWING THE MARKET OUTCOMES OF POLICY CHOICES: A CASE STUDY APPROACH

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

- · Effects of an Unreasonable and Unstable Tax Rate
- Successful Tax Rate Environments
- Tax Rate vs. Regulatory Environment (Managed vs. Free-Market)
- Effects on Tourism

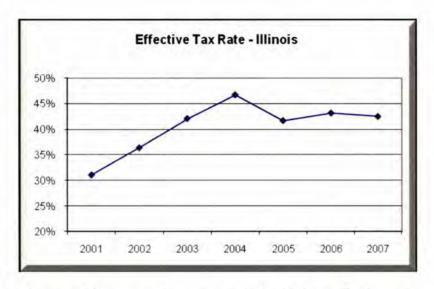
## Effects of an Excessive and/or Unstable Tax Rate

Today's gamers have come to expect significant scope and quality, including numerous food & beverage and entertainment options. If the effective gaming tax rate is set at an equitable level in Bermuda, ultimately the gaming facilities will be more competitive at the international level and gaming revenues (especially those sourced from tourists), and hence gaming taxes, will be maximized.

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

#### Illinois

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



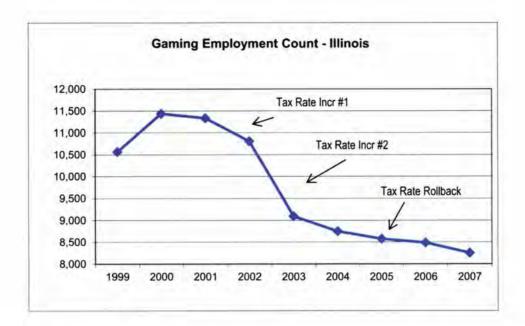
The net result of the unstable tax environment and the higher effective rate was an industry reaction, in an attempt to salvage profits, which curtailed economic expansion, decreased gaming revenue and negatively affected the quality of the gaming product for consumers.

#### Impact on Economic Expansion

One of the best measures of economic expansion associated with a particular industry is employment. Direct employment in the gaming industry in Illinois peaked in 2000 at 11,434 employees, remaining steady at 11,333 through 2001. In 2002, the year of the first tax rate increase, employment declined 5% to 10,808 employees. The following year, in reaction to the second and the largest of the tax rate increases, employment dropped 16% to 9,094 employees. Employment continued to decline in 2004 as the full year effect of the June 2003 tax increase was realized. Employment stabilized somewhat following the tax rate rollback, which took effect in 2005, only to regain negative momentum in 2007. Since the peak in employment, 2,686 jobs were lost reflecting approximately \$67 million in salaries. The following table and graph display the employment count data associated with the gaming industry in Illinois during the period of tax rate volatility:

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

Source: Illinois Gaming Board



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

## Decline in Gaming Revenue

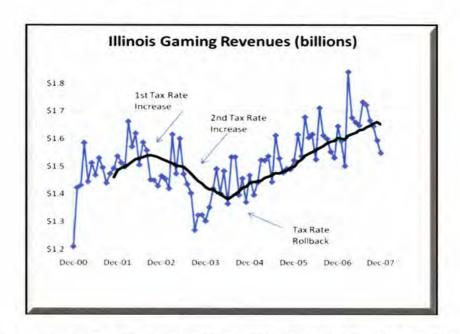
The most notable impact of the tax rate increases was the decline in Illinois gaming revenue. The decline in gaming revenue was mainly due to the reaction of the casino operators to implement policies to maintain profit margins. The casino operators reduced allocations for marketing and promotional items, mainly related to giveaways. Additional operating changes included reducing operating hours, charging admission fees and cutting back on customer service elements. The casino operators targeted remaining marketing efforts towards the high-end gaming segment. The strategy made sense especially considering the restriction on the number of slot machines associated with gaming in Illinois.

The casinos in Illinois posted gaming revenue in 2000 of \$1.658 billion, a strong 22% increase over the prior year. The gaming revenue growth rate moderated somewhat in 2001 to 8%. Gaming revenue peaked at \$1.832 billion in 2002, a modest 3% increase over the prior year as only the second half of the calendar year 2002 was impacted by the first rate increase. The second rate increase in June 2003 had the more profound impact, as gaming revenue fell 6.6%, the first year over year decline in gaming revenue since the inception of gaming in Illinois. Gaming revenue in 2004 was relatively flat at \$1.718 billion. Following the rate rollback, gaming revenue increased 4.7% to \$1.799 billion in 2005, then 6.9% to \$1.924 billion in 2006,

and again in 2007 to 1.983 billion (a gain of just over 3% over the previous year). The following chart shows annual gaming revenue for the Illinois casinos over the last several years:

	Gaming	
	Revenue	% Change
	(\$ millions)	10.20.149
1999	1,363	
2000	1,658	21.60%
2001	1,784	7.60%
2002	1,832	2.70%
2003	1,710	-6.60%
2004	1,718	0.50%
2005	1,799	4.70%
2006	1,924	6.92%
2007	1,983	3.09%

Source: Illinois Gaming Board



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

**Illinois Gaming Admissions** 

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

Source: Illinois Gaming Board

It is important to compare the Illinois statistics to neighboring states in order to rule out on overall industry decline. Prior to June 2002 the gaming revenue growth rates in Illinois and Missouri were similar. There was a clear divergence beginning in June of 2002, the date of the first Illinois rate increase. For fiscal year 2003 (July 2002 through June 2003) the spread between Missouri's gaming revenue growth rate and that of Illinois was nearly eleven percentage points. For fiscal year 2004, the disparity in growth rates was similar. Following the one-year anniversary of the second tax rate increase, growth rates between Missouri and Illinois were again comparable. The following chart and graph highlight the disparity in growth between Missouri and Illinois:

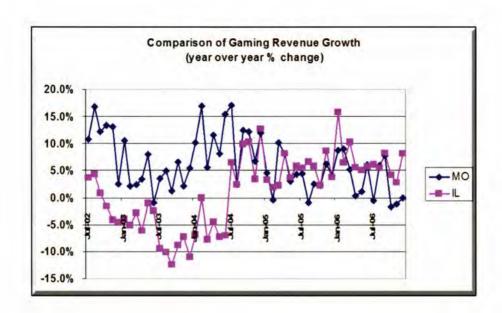
**Gaming Revenue Growth Rate** 

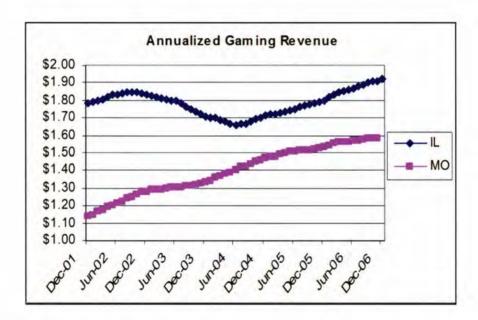
	Illinois	Missouri	Spread
FY 2002	2.67%	12.42%	9.75%
FY 2003	-6.63%	4.07%	10.70%
FY 2004	1.03%	10.72%	9.69%
FY 2005	4.13%	4.00%	0.13%
FY 2006	6.93%	3.93%	2.99%
FY 2007	3.11%	-0.04%	3.15%

Source: Illinois Gaming Board; Missouri Gaming

Commission

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





## Decline in Quality of Gaming Product

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

This was evident in Illinois following the second tax rate increase in June 2003. For instance, according to an August 1, 2003 article in the Chicago Sun-times, Harrah's Joliet sent letters to

gaming customers citing an upcoming admissions charge. The article also noted that Harrah's discontinued its breakfast buffet and hotel room service and curtailed other food and beverage offerings. The Harrah's general manager noted that the changes were the result of the high tax environment. Hollywood Casino also announced its intention to charge for admission, parking, and soft drinks, all complimentary in the past. Finally, several casinos petitioned the Illinois Gaming Board to allow for shorter hours of operation.

#### New York and Florida

While we are not suggesting racinos in Bermuda, the cases of New York and Florida offer evidence as to how excessive taxation in a gaming jurisdiction that geographically competes with a low or no-tax jurisdiction can equate to reduced competitiveness in the high-tax jurisdiction.

#### New York

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

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

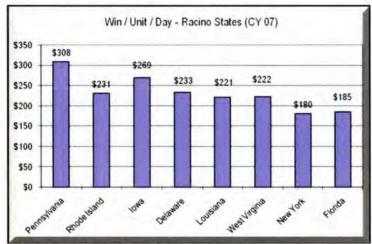
This relief was not sufficient to ensure the financial health of some of the smaller tracks in upstate New York, which compete directly with Native American casinos that are either untaxed, or share revenue at a much lower rate. Some of these tracks have been on the verge of bankruptcy. This brought about the passage of the most recent bill (previously discussed) which became active in April of 2008. The bill increased racetrack commissions (in greater favor of troubled properties) and allowances for promotional activities so as to bolster the ailing operations and the health of the state's industry overall.

The saga in New York is illuminating and shows how long and difficult it can be to get the correct balance of taxes, capital investment, and revenue generation that are most likely to maximize benefits to the state.

As noted previously VLT operations in New York were generating very low returns, as measured by win per unit per day<sup>7</sup>, in comparison to other racino jurisdictions.

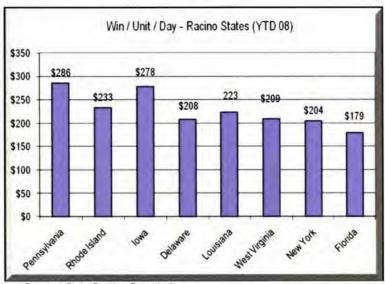
Win per unit per day for New York in CY 2007 was about \$180, just \$3 more than the previous year and well below the 2007 simple average for other racinos of about \$238. One of the arguments regarding New York, which is supported by the Innovation Group, is that because of the high tax rates operators have not invested heavily in their facilities or customer development. As a result, many of these facilities do not offer competitive products compared to other regional choices like casinos in Connecticut or Atlantic City.

Revisions to the effective tax rate coincided with statewide performance increases on a per unit basis for the most recent statistics available for 2008, YTD win per unit measuring \$204, immediate effects likely created by increased marketing budgets as opposed to immediate capital expenditure. It should be noted that win per unit since the distribution adjustments took hold this past April was \$212. The following graphs display win per unit per day for the major racino jurisdictions for CY 2007 and YTD 2008:



Sources: State Gaming Commissions

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



Sources: State Gaming Commissions

Notes: Win per unit based on data reported through Oct 31, 2008 for Iowa, New York, Delaware, and Florida; September 30, 2008 for Pennsylvania, Louisiana, and West Virginia; and August 31, 2008 for Rhode Island

#### Florida

Florida provides another example of how a high tax rate can reduce the competitive effectiveness of a gaming operation. In Florida, the state tax rate is 50% (which includes a 3% distribution to local government), with the tracks negotiating a share for purses from the remaining 50%, estimated at 7.5%. At first glance, win per position performance has been lower than would be expected for this market, as seen in the table below.

 Florida Racinos 2008

 Property
 Win Per Position

 Pompano (ISLE)
 \$220

 Mardi Gras
 \$158

 Gulfstream (MECA)
 \$140

Source: State of Florida

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

#### Louisiana

Louisiana provides an example of a situation where the requirement of an up-front fee combined with high gaming taxes contributed to a severe negative impact on the industry. The land-based casino in New Orleans was required to pay a minimum of \$100 million in state taxes annually,

and riverboats an effective tax rate of about 21.2% on gaming revenues. Local taxes for riverboats elevate the effective rate by an additional 5%, approximately. In 1995 two new riverboat casinos opened in New Orleans. They both closed within nine weeks. The City of New Orleans was left to fight with other creditors over collecting \$3 million in taxes and fees.

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

The Louisiana riverboats lagged other markets in terms of profitability. The Innovation Group believes that the tax rate is too high in relation to the competitive and regulatory environment. Louisiana is known for strict controls on slots, which often delay the latest and greatest machines from getting to the casino floor.

## Maryland and the United Kingdom

Experiences in the U.S. state of Maryland and in the United Kingdom provide insights into the typical outcome of policies which produce excessive taxation, a restrictive regulatory environment, an unstable tax or regulatory environment, or some combination thereof. Both jurisdictions are in the midst of introducing or expanding gaming within their borders. Their experiences are particularly useful in demonstrating the impact of policy on the ability of a jurisdiction to attract the desired level of capital investment in its gaming industry.

These examples offer a cautionary tale to governments considering gaming legalization: Ignoring the basic economic needs of industry stakeholders increases the probability that benefits to the state (in whatever form they are being sought) could as best remain marginal, and may go completely unrealized.

## Maryland

In November 2007, Maryland Government officials passed House Bill 4 (HB4), allowing a referendum on the legalization of Video Lottery Terminals (VLTs) with the primary purpose for providing funds for public education. The question of legalization, which had been turned down in the past, came at time when all other surrounding states had permitted gambling in some form within state limits, making a compelling case for Maryland to do the same. Citing the financial benefits associated with its approval, the bill was passed by a large percentage of residents in

November 2008. The amendment permits the issuance of five video lottery licenses and the operation of 15,000 slot video lottery terminals in predetermined locations. The following is a list of the locations, the number of terminals allowed and other specified stipulations.

An initial license fee of \$3,000,000 for every 500 video lottery terminals is required and must be paid at the time of the application. In addition, bidders must exhibit a \$25,000,000 direct investment by the applicant for construction and related costs for each 500 video lottery terminals included in the bid. There is also an annual fee of \$42 per video lottery terminal. The Maryland tax rate is set at a very high 67% of gaming revenue.

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

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

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

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

Thus, the primary goal of the process of legalizing casinos, i.e. government revenue generation and revitalization of the horse racing industry, is unlikely to be realized.

## United Kingdom

Casino operations in the U.K. are presently limited to just 20 machines a piece which operate under both strict bet and payout restrictions. A new regulatory regime was introduced in 2005 with the intent of supporting growth in the casino segment through the addition of 17 casinos.

While restrictions would remain rather stiff, the new law is substantially more lax in areas of casino size and payout limit, which would enable the new facilities to compete more substantially as an entertainment experience. A specific number of licenses would be issued in the following formats:

One regional casino – What began as a proposal for multiple regional "super" casinos became legislated as the addition of just one regional casino to the marketplace following strong opposition to the proliferation of Vegas-style gaming by a number of U.K. anti-gaming forces. Defined as having a customer area of at least 5,000 square meters (50,000 sq ft) and up to 1,250 gaming machines with unlimited jackpots, the remaining regional facility was earmarked for the city of Manchester.

Eight large casinos - A minimum customer area of 1,500 square meters and up to 150 gaming machines with a maximum £4,000 jackpot.

Eight small casinos - A minimum customer area of 750 square meters, and up to 80 machines. Unlike the others, they cannot offer bingo.

Shortly after taking over as Prime Minister in June 2007, Gordon Brown announced that the entire super-casino issue was under review – adding to the number of blows suffered by the casino sector during the course of 2007. As well as the UK-wide smoking ban introduced on July 1, in his final Budget as Chancellor, in March Brown raised the upper threshold on casino gaming tax to 50 percent (effectively a 36% hike in the overall tax burden).

The result of these moves strongly contrasted with the intent of the 2005 law. Thus, the growth anticipated as a result of legislative change has been undermined by the government's recent approach to taxation.

Revenues at existing facilities have been adversely affected by the smoking ban which went into effect in 2007, as well as the increase in casino gaming duty introduced in the 2007 Budget. Doubts continue to surround when the so-called 'super-casino' authorized under the 2005 Act will be introduced, or whether it will even be introduced at all. The country's largest operators have expressed their growing dissatisfaction with the UK's approach to casino regulation and taxation.

For example, Malaysia-based Genting (the UK's largest gaming operator) recently reported a 90 percent drop in profits from its UK casino operations, which operate under the Stanley's brand. Peter Brooks, executive deputy chairman of the group was quoted as saying: "It is ironic that the government allowed us all to believe they were going to encourage the gaming industry to be a launch pad for regeneration, when in fact they introduced new levels of tax that are making a major contribution to the serious pressures the industry now faces."

Rank Group, the second largest group operating in the country has also seen its shares battered over the last year as a ban on smoking and forced removal of lucrative slot machines has provoked a steep decline in business, and the gaming tax hike has hurt its casino profitability.

Finally, UK gaming operator Ladbrokes confirmed that it had scrapped plans to re-enter the British casino market. Formerly a major player in the sector, Ladbrokes' interest in the UK's land-based casino industry was reinvigorated by the 2005 Gambling Act. Ladbrokes announced that it has decided not to bid for any of the sixteen new UK casino licenses expected to be introduced under the 2005 Act. The move, that Ladbrokes is calling a 'commercial decision', has generally been interpreted as a result of the unstable nature of the government's attitude towards casino gaming in the country.

A Ladbrokes spokesman said "We have conducted a review of our casino strategy and have decided to withdraw from the process due to the length of time it would take to generate sufficient return on the capital spend required."

## Successful Gaming Environments

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

#### Nevada

Nevada is the second largest gaming jurisdiction in the world (trailing only Macau), with roughly \$35.4 billion in capital investment, generating \$12 billion and \$1 billion in annual gaming revenue and gaming taxes and fees, respectively. The gaming industry in Nevada employs over 202,200 people and serves as the economic engine for most Nevada cities. As discussed at length, one of the key factors for the success of the industry is the low effective tax rate of 8.5%, as a lower tax rates encourage greater capital investment. In addition, the unrestricted gaming environment also helps to maximize revenue and profit potential and thus contributes to more capital investment. Yet despite the lowest effective gaming tax rate in relation to the comparable group, the Nevada casinos display one of the lowest EBITDA profit margins of around 20%. This is due to the intense level of competition in the market. As of June 2005, over 268 casino operations are competing for business in Nevada. In addition, Nevada competes with other local gaming markets. It is generally accepted that the tax regime in Nevada has resulted in achievement of the goals upon which it was based namely the development of gaming facilities capable of attracting gamers from across the globe.

## Mississippi

Mississippi is in many ways similar to Nevada, with a relatively low effective tax rate and high capital investment. The Chief Executive Officer of Pinnacle Entertainment, a casino owner in Mississippi, noted that the Las Vegas-style gaming in Mississippi is a function of the low gaming taxes. The Mississippi casinos employ roughly 28,800 people. The gaming industry in Mississippi generates roughly \$2.8 billion in annual gaming revenue, resulting in about \$345 million in taxes and fees. Again, despite Mississippi's low effective tax rate of about 12%, profit margins are not unreasonably high at approximately 27%. Again, this is due to a high level of competition. Mississippi has 29 casinos with nearly 1.5 million square feet of gaming space and 38,800 slot machines (prior to Hurricane Katrina). Mississippi also competes with casinos in Louisiana, particularly New Orleans, and Baton Rouge. Thanks to the profit margins, gaming companies continue to invest money in Mississippi. Gaming operators are anxious to rebuild the

Gulf Coast following the destruction caused by Hurricane Katrina. The reasonable effective tax rate still makes Mississippi a good place to do business.

#### Missouri

Missouri's gaming tax strategy also works well, featuring a higher tax rate, relative to Nevada and Mississippi, in conjunction with a control on competition. Although Missouri's effective tax rate is higher than Nevada and Mississippi at 27.4%, the casinos still exhibit a reasonable EBITDA profit margin of about 27.1%. This is due to the limitations on competition associated with the policy of the regulatory agency, as discussed earlier. Yet capital investment in Missouri was reported at \$1.8 billion, a decent amount for a state with only 11 casinos. The industry employs roughly 11,100 people, an average of about 1,000 per casino. Missouri generally exhibits large casinos in the major markets with ample amenities including numerous high-end hotels. The profit margins encourage the existing casinos to reinvest in their projects. The Missouri Gaming Commission reported that since the inception of gaming in 1994, Missouri casinos have reinvested approximately 60% of operating cash flow (EBITDA) back into their operations.

#### Bahamas

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

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

For Bermuda, the development of smaller properties is important. If the licenses can be tied to hotel properties, this could potentially bolster development of new hotel supply (new rooms) and subsequently induce incremental international tourist visitation via hotel marketing efforts and the overall improvement of the tourism product. This goes a step beyond the Singapore model of implicitly emphasizing mega gaming projects in their policy approach.

## Tax Rate vs. Regulatory Environment (Managed vs. Unmanaged)

Capital investment will not vary across markets strictly according to the tax regime, but can also vary based on a combination of the tax and regulatory environment. Jurisdictions throughout the Latin American and Caribbean regions yield insights into the interplay of these two policy levers as they impact overall capital investment, and ultimately the level of utility the industry represents to the state.

In Jamaica and Peru we see how nominal tax rates and a lax-market regulatory environment lead to a disjointed, local's oriented industry. In Panama, we see that despite a low tax rate, the lax regulatory policy enabled an environment that, in the long run, undermined the ability of the government to create an industry which fostered its goals of tourism development. In Chile, we see how extreme and pro-active levels of market management combined with a competitive RFP process enabled the country to reap economic development, tax revenue, and tourism enhancement goals despite a somewhat higher tax rate and strict development (investment) requirements.

#### Jamaica and Peru

While both of these markets are undergoing change in terms of tax policy, regulation, and overall goals for their gaming industries, Jamaica and Peru have similar histories which has led them to where they are today. Though occurring for different reasons in each market, a history of loose legislation and lax regulatory enforcement effectively created a low tax, or no-tax environment, with few if any licensing requirements. These extreme examples of the free-market approach over time enabled the proliferation of approximately 1,000 small operations in each market. In 2006 (prior to new regulations) Peru's 8 casinos and 930 game rooms (89% unregistered) housed 56,000 slots (an average of just 59 per facility); the Jamaican gaming environment consisted of approximately 1,200 operators with less than 20 machines, and around 14 gaming lounges that were licensed to have between 20 and 150 VLTs. Historically, tax collections amount to but a small fraction of what they should have been given the revenue generated—that is when they were collected at all.

The collection of small and disjointed facilities which has evolved in both markets fails to act as a lure for tourists. Such facilities do not contribute to tourism product as they cannot effectively market themselves to domestic, let alone international demand and, they are not attractive enough to be leveraged as a destination marketing tool. Witness how in both markets these small facilities have been estimated to garner hundreds of millions of dollars in gross gaming revenues, primarily from locals.

For their part, both markets are focusing on change, Peru is focusing on policy shifts that increase regulation, monitoring, and taxation of its existing facilities while Jamaica is more intent on drawing mega-developments oriented to tourists. However, it is their historical policy approach combined with implicit tax effects which has them both back-tracking in search of more beneficial implementation structures for the gaming industry within their borders.

#### Panama

Panamanian casinos and slot halls are governed by Decree Law No. 2, which in 1998 privatized the then state-run industry by setting out detailed laws and regulations for the country's new private operators. Casinos in Panama are permitted in any hotel of 300 rooms or more providing they are situated beyond a certain distance from schools and hospitals. The low entry barrier was intended to accelerate the development of the nation's then burgeoning and now booming tourism sector. The market's performance has realized double-digit growth every year since 2002. However, contrary to the initial intent of the 1998 legislation, it is increasingly Panamanians, rather than international tourists, that are driving the sector's robust growth.

Panama's 14 full scale casinos collectively house 3,477 slots and 212 gaming tables. In addition, another 3,451 slot machines are divided amongst the country's 27 slot halls. Slot halls, which average 127 gaming positions per facility to the average of 355 typically housed in a full scale casino, are generally smaller facilities which in addition to lacking table games do not offer amenities, services, or overall attraction of a full scale casino.

Panamanian gaming performance is provided in terms of slots and tables and is not property-specific, thus no official information is available regarding the performance of full scale casinos versus slot halls. Based on past Innovation Group engagements in the market, of the \$246 million of Panamanian gaming revenues reported driven by the full scale casinos and the slot halls in 2008, we would estimate that slots and tables located in full scale casinos generate approximately 73%, or \$180 million, of the total.

Potential for tourism oriented investment was marginalized in the case of Panama despite the low 10.5% levy on its casinos. The capital investment decision was governed more by the very competitive environment which quickly developed in major population centers through the rapid proliferation of full scale casinos and slot halls. With some exceptions, the level of competition created an environment too risky to attract the level of capital necessary to target international tourists as the primary demand segment. The table below offers a profile of full scale casino operations in Panama.

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Facility		Slots	Tables	Positions
Veneto Hotel and Casino	Panama City	511	42	805
Casino Majestic	Panama City	489	36	741
Royal Casino	Panama City	300	27	489
Hotel El Panama & Fiesta Casino	Panama City	561	20	701
Riande Contiental Hotel & Crown Casino	Panama City	150	20	290
Gran Hotel Soloy & Fiesta Casino	Panama City	313	11	390

Riande Granada Hotel & Crown Casino	Panama City	40	5	75
Sheraton Panama Hotel & Crown Casino	Panama City	200	4	228
Fiesta Casino @ Hotel Washington	Colon	195	11	272
Fiesta Casino	David	280	12	364
Fiesta Casino Decameron Hotel	Fallaron	93	7	142
Hotel Guayacanes	Chitré	150	6	192
Casino Mallorca	Colon	75	4	103
Casino Mirage	David	120	7	169
		3,477	212	4,961

Source: Property websites; Casino City; Gamingfloor.com; The Innovation Group

#### Chile

Prior to 2005, gaming in Chile consisted of approximately 3,500 slots and 165 tables which operated in seven lightly taxed and loosely regulated facilities. A task force orchestrated by the national lottery in 2004 further estimated some 10,000 clandestine slots scattered throughout the country, half of which could be found operating in the capital region. The government of Chile sought the economic benefits of more gaming in 2005 legislation aimed at removing clandestine operations and enabling tightly controlled expansion of the industry under a competitive bid process that would allow for maximum transparency.

Through this, the Office of the Superintendent of Casinos ("SCJ") was created and given the tools and authority to govern, regulate, and enforce the letter and intent of the law. Since that time the SCJ has been granted the authority to license a maximum of 27 casinos: 7 of which predate the 2005 decree; and 17 which resulted from it, and 3 others which were subsequently added. Licenses were distributed in an elaborate and highly competitive bid process whereby the SCJ based their decision on criteria such as the likely impact of the proposal on tourism in the region in question, as well as the quality of the casino project itself. The process was designed to provide maximum transparency in all its facets and to strictly control the level of competition in each market region. The SCJ estimates that these 17 new casinos will generate approximately \$267.4 million in total in the first year of operations, yielding \$44.8 million in tax revenues. Tax streams generated for the country by the first 17 new facilities are anticipated to total \$204 million by the fifth year of operations.

With an effective tax rate of 30.2%, Chile's tax burden is not a low one. Yet the country managed to effectively entice over \$800 million dollars of tourist-oriented capital investment to Chilean municipalities that in many cases was unlikely to occur. The facilities will range in size from 200 to 800 machines and have up to 60 tables, and will all be coupled with a variety of ancillary developments (hotels, evens centers, IMAX theaters, restaurant and retail complexes, etc.) positioned to attract both domestic and international tourists. This goes to the point of the importance of stability for investors. Chile's implementation was so strictly planned and controlled that potential investors were not deterred by the high tax rate, because in effect the government was guaranteeing a large amount of certainty in regards to the competitive situation and taxation. Thus by reducing the element of uncertainty and risk, government was able to create conditions which allowed its goals to be achieved even with a higher tax rate.

# IDENTIFYING POLICY DETERMINANTS OF GAMING INDUSTRY HEALTH & DEVELOPMENT

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

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

- 5. Economic Expansion
- 6. Long Term Maximization of Gaming Tax Revenue
- 7. Quality Gaming Product for Gaming Consumers
- 8. Industry with Long-Term Viability

We will expand on these benefits, and describe how the concepts of *profit* and the *capital investment* directly relate to each. Namely, we will explore how the level to which any one, or all of these, can be achieved is directly determined by the level of capital investment in the market, and, indirectly determined by the factors that drive the investment decision (i.e. profitability). While no jurisdiction can control all of the factors, many are heavily influenced by the appropriateness of tax and regulatory policies designated by the government.

The sections below will identify the determinants of the capital investment decision and discuss the manner in which they are so critical to the level of capital investment made available for gaming projects. Next, we will examine how the idea of maximizing the attraction of capital plays into the generation of a range of benefits including, but not limited to, the enhancement of tourism. Finally, we will address the general implications these concepts have on policy development. The section which follows will apply these findings to the case of Bermuda.

## Determinants of the Capital Investment Decision

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

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

The capital investment decision model weighs the cost of acquiring capital against the estimated Return on Investment Capital ("ROIC"). The cost of acquiring capital is a function of interest rates and the returns required by equity investors. The ROIC is calculated by dividing the expected profitability of a project by the estimated cost of the project. If the ROIC meets a required rate of return or hurdle rate, the company is likely to move forward with the project. Generally, hurdle rates in the gaming industry range between 18% and 24%, based upon the market dynamics, risks associated, licensing and regulatory environments, cost of capital, and other considerations.

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

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

## Gaming Tax Burden

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

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

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

## Up-Front License Fees as Taxation

From a business perspective, these are nothing more than another way of taxing the industry. Typically, the license fee will be amortized over a period of time, as such they represent an additional annual burden on the operator inflated by the interest charged by banks and lending institutions. The cost to the operator of paying a license fee must be considered when assessing the viability of the annual effective tax rate ("ETR"). As shown in the table below, sizeable license fees can increase the effective tax rate significantly. In this example, we have assumed a facility generating \$200 million in gaming win and a range of license fees to illustrate how the license fee increases the effective tax rate. We have assumed the license fee would be amortized over 8 years at an 11% interest rate. The table shows that as the license fee increases the effective tax rate on the operator will also increase. It is clear from this that the establishment of a license fee should be considered with regard to the effective tax rate and the ability of the operators to compete in the marketplace.

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

Gross Revenues	License Fee	Annual Payment*	Fee Impact on ETR	
\$200,000,000	\$50,000,000	(\$9,716,053)	4.90%	
\$200,000,000	\$100,000,000	(\$19,432,105)	9.70%	
\$200,000,000	\$200,000,000	(\$38,864,211)	19.40%	

\*Over 8 Years, 11% interest

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

License fees generally are being included as part of the overall casino construction and development budgets in new project financing transactions. The license fees cannot be financed separately from the related development, as lenders will require a fully-financed deal to ensure sufficient capital will be available to construct the cash flow machine (the casino), which is the primary source of repayment. As a result, the overall financing for a new casino development with license fees will consist of equity equal to 20-25% of total project costs and the remainder in non-recourse debt financing up to a maximum total leverage ratio of approximately 5.0x-5.5x (Total Debt to projected year one EBITDA) depending on the market strength. Typically, this new debt financing will have maturities of 5-6 years for the senior components if completed in the bank and pro-rata markets and 7-8 years for subordinated components and/or for traditional high yield bond financings.

Therefore, if EBITDA is \$40 million the operators can borrow up to \$200 million. If the license fee is \$100 million, the operator has only the ability to borrow \$100 million for construction as opposed to \$200 million in the absence of a license fee. This can make a significant difference in the quality of a development and the amenities it offers. The result will be a reduction in competitiveness and significantly reduced revenues and tax receipts. If however a license fee is to be considered a concomitant decrease in tax rate, at least for the period over which the license fee would be financed, (typically eight to nine years) should be strongly considered.

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

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

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

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

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

## Stability of Tax Rate Structure

The stability of the tax rate structure will also impact the investor's ability to acquire the necessary capital on terms that make the project economically feasible. An unstable gaming tax

rate environment will increase the risk profile of a potential project and thus the cost of capital for the project. The lenders in the gaming industry are particularly cognizant of the risk factors associated with the industry and will assign a higher risk premium (and thus charge a higher interest rate) for projects associated with a gaming environment that exhibits volatility, such as one where the gaming tax rate structure changes often or new competition is constantly being added.

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

Again, a higher risk premium means a higher interest rate for the gaming company. In turn, a higher interest rate means certain projects with lower ROIC estimates will not be undertaken. The cost of debt capital or interest rates in the gaming industry for risky projects can often reach 10% to 14%. Therefore, the estimated ROIC must be substantially higher in order for the investor to earn a return, generally in the 20% to 25% range for most gaming companies.

## Leverage Issues

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

- Maximum debt limited to 4.5x-5.0x projected steady state EBITDA
- Cost of Debt Capital = 7%-14%
- Implied Cost of Equity Capital = 17%-30%

Alternatively, in a leveraged environment where debt is utilized to finance the development, operators must be able to attract debt financing at reasonable rates and under reasonable terms. Utilization of high levels of leverage or financing facility developments with high-yield or "junk bond" rates inserts a significant additional element of risk into the project. In addition, there are restrictions including a limit on the amount of debt an operator can raise for a project, generally 4.5x to 5.0x the amount of EBITDA the project can generate. Lenders will also generally require that EBITDA be equal to at least twice the interest expense associated with the debt incurred. Therefore, if EBITDA is impaired by higher gaming taxes, the gaming operator may be unable to borrow the money necessary to fund the project. License fees are also generally included in the amount of money to be borrowed and are part of the overall financing package. Therefore the assessment of any license fee will automatically reduce the amount that can be borrowed to fund construction of a quality gaming facility. This could reduce competitiveness with properties in nearby or other competitive jurisdictions. Subsequently revenue potential is diminished along with tax revenues to the state. If however a license fee is to be considered, a concomitant decrease in tax rate, at least for the period over which the license fee would be financed,

(typically eight to nine years) could be considered in order to offset the impact of the license fee on borrowing ability.

## Regulatory Environment

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

# Generating the Benefits of a Healthy Gaming Industry

The Innovation Group identified the following four tangible benefits of a healthy or profitable gaming industry to a state:

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

In the section which follows, we will expand on these benefits, and describe how the concepts of *profit* and the *capital investment* directly relate to each. Keep in mind that Bermuda's primary goal of recognizing a sustainable increase in the quality and diversity (and competitiveness) of the tourism product via the installation of casino gaming derives from creating an environment which maximizes benefit (#3) the quality of the gaming product for gaming consumers, and benefit (#4) the long term viability of the industry.

## **Economic Expansion**

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

## Construction Impact

The construction impact relates to the initial spending on the bricks and mortar associated with the building project, whether a casino, parking garage or restaurant. The construction impact is quantified in the form of salaries and wages to designers, managers and construction workers and spending on the materials, usually acquired from local vendors, such as concrete and steel. The construction impact also includes an indirect component or multiplier effect as local businesses hire more people, build new facilities and buy additional equipment to accommodate the unusual increase in demand. For example, the concrete company may need to hire more drivers or buy

additional trucks to handle the increase in business. The benefits associated with the construction impact are one-time in nature as they cease when the construction project is complete.

### Ongoing Impact

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

## Long-term Maximization of Gaming Taxes

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

A healthy gaming industry perpetuates maximum tax benefits to the state by enabling the gaming operator to maximize revenues. The casino operator will look to maximize gaming revenue and profit in relation to capital investment. In addition, the primary goal of most expansion projects in the gaming industry is to increase gaming revenue. Even with regard to a parking garage or restaurant expansion, the objective is to draw patrons to the casino. As discussed earlier, the revenue potential is one of the main variables in the ROIC calculation. The revenue potential as well as the profit margin is generally higher for the gaming component. The direct revenue associated with an entertainment venue or restaurant would be considered ancillary. As with most jurisdictions, gaming taxes are directly tied to gaming revenue. Therefore, as capital investment increases, so will gaming revenue and thus gaming taxes.

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

Another end result of a healthy and profitable gaming industry is a high quality gaming product for the gaming customer that will compete with gaming products offered by competitive tourist destinations in the region. As has been discussed at length in this report, profitability leads to capital investment and capital investment is typically geared towards generating additional gaming revenue. In order to realize this goal, the casinos will need to improve the gaming product. The gaming customer, especially in a competitive environment, will demand an

increasing level of quality in exchange for a higher gaming budget. Therefore, in order to realize additional gaming revenues [and incremental tourist visitation to Bermuda] a gaming operation will need to improve the gaming product relative to its [regional] competition.

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

## Industry with Long-term Viability

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

# Summary of General Policy Implications

In order to maximize the impact on tourism in Bermuda the country should ultimately look to develop gaming as a strategic marketing tool. In order to do this, the industry must be viable and sustainable for the long term and provide the kind of overall experience that is competitive; and, that complements the existing tourism industry and experience of Bermuda. Also, a system must be in place to ensure capital investment and thus the development of attractive and competitive To accomplish this proposed new projects and expansion projects must achieve a facilities. certain level of profitability. In the gaming industry, the profitability of a project is highly dependent on a number of determinants—those under control of the government include the gaming tax burden and the regulatory environment. Profitability is necessary in order to attract capital to the market. The amount of capital and the cost of capital will be dependent on the risk profile of the market. An unreasonably high effective tax rate or an unstable rate environment will increase the risk profile of any project. The risk profile of a larger-scale project is also particularly susceptible to uncertainty in regulatory environments. In markets where the production of the gaming industry is expected to be of a more modest magnitude, attracting larger projects will also require a more strictly managed market environment. Therefore, the tax and regulatory structure and their respective stability remain a dominant component in the battle to maximize capital investment.

However, it is important to remember that capital investment will not vary across markets strictly according to the tax regime or employed regulatory mechanisms individually, but rather in relation to the combined tax and regulatory environment. Ideal calibration of the two policy levers does not only consider government objectives but also market realities (what is the value of the opportunity being presented). Additionally the efficacy of any given combination tax/regulatory policy may be enhanced or reduced depending upon method of implementation, which through examples of various RFP processes we have shown must be in line with market realities as well.

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

# POTENTIAL REGULATORY COSTS TO BERMUDA

If approved, expanded gaming in Bermuda will likely be subject to strict oversight, similar to many other jurisdictions. While it can be challenging to develop an effective structure to maintain and regulate the industry, relative to other government functions, there is a direct relationship between strict oversight, public benefit, and the long-term success of the operations. Since regulatory and public costs for lotteries are covered in the lottery section of this report, this section will focus on regulatory costs related to casino gaming.

Legislation enabling gaming in most jurisdictions outlines oversight of the industry, typically by creating an independent agency (or, at times, an existing and qualified agency) to oversee gaming activity as well as public policy goals. Agencies typically have law enforcement powers with responsibilities including the investigation of license applicants, the issuance of licenses, continuing license reviews, monitoring casino operations, investigations of alleged violations, financial and operational audits, collection of fees, and the clear communication to industry participants and the public of the status of the industry including performance, approved and rejected applicants, and ongoing enforcement results. In order to aid in this endeavor, operational and technical controls are established including the casino's surveillance team, which typically reports directly to the board of directors, as well as other elements including the adoption of minimum accounting controls, establishment of rules for games, effective controls for electronic devices, systems of checks and balances, and anti-money laundering systems.

The establishment of these responsibilities requires additional resources that are typically offset by licensing and investigation fees and gaming taxes. Investigations in almost all cases are broad and thorough, and a significant budget and staff are typically required. Many gaming control boards cooperate with one-another and other law enforcement agencies in order to license individuals and organizations.

If approved, and prior to the commencement of casino gaming, legislation enabling gaming will outline parameters including a licensing process for individuals, vendors, and organizations and a selection process for a potential location or locations. During this early establishment stage, licensing fees, RFP fees, and other associated charges are typically paid by applicants. Fees are typically structured to cover costs, with some direct costs being billed back to applicants. As these fees would not likely represent a cost to government or society they have been considered to be a 'wash' for our purposes.

For ongoing operations, staff will be required to undertake various tasks, and staff and payroll are estimated in the following table. Staffing is based on three casinos being located in Bermuda. Salaries are based on the government's 2008-2009 budget provided by the Ministry of Finance and assume that salaries would be consistent with those currently received by individuals performing similar functions. The total payroll is estimated at \$1.7 million dollars.

**Estimated Payroll Expenses: Gaming Control Board** 

Title	No. of positions	Gross Pay / Position	Total Salaries	Benefits @ 28%	Total Salaries and Benefits
Board chairman <sup>1</sup>	1	\$0	\$0	\$0	\$0
Appointed board members <sup>1</sup>	2	\$0	\$0	\$0	\$0
Auditor and treasurer board-members <sup>1</sup>	2	\$0	\$0	\$0	\$0
Executive director	1	\$120,000	\$120,000	\$33,600	\$153,600
Executive secretary	1	\$40,000	\$40,000	\$11,200	\$51,200
Chief inspector	1	\$80,000	\$80,000	\$22,400	\$102,400
Inspector (assumes 3 locations)	5	\$40,000	\$200,000	\$56,000	\$256,000
Clerical support -inspectors department	1	\$35,000	\$35,000	\$9,800	\$44,800
Chief enforcement	1	\$85,000			
Enforcement officer	1	\$65,000			
Licensing manager	1	\$80,000	\$80,000	\$22,400	\$102,400
Licensing specialist	2	\$50,000	\$100,000	\$28,000	\$128,000
Chief revenue auditor	1	\$80,000	\$80,000	\$22,400	\$102,400
Lead revenue auditor	1	\$60,000	\$60,000	\$16,800	\$76,800
Revenue auditor	4	\$40,000	\$160,000	\$44,800	\$204,800
Clerical support -revenue audit department	1	\$35,000	\$35,000	\$9,800	\$44,800
Legal counsel	1	\$120,000	\$120,000	\$33,600	\$153,600
Para-legal	1	\$60,000	\$60,000	\$16,800	\$76,800
Clerical support-legal	1	\$40,000	\$40,000	\$11,200	\$51,200
Chief information technology	1	\$80,000	\$80,000	\$22,400	\$102,400
Information technology specialist	1	\$40,000	\$40,000	\$11,200	\$51,200
Total	23		\$1,330,000	\$372,400	\$1,702,400

Source: The Innovation Group

Operating costs for these employees are included in the following table. Whenever possible these costs are based on those noted in the local economy or in the government budget. These add up to a total operating budget of \$466,050.

<sup>1)</sup> Board members typically do not receive compensation beyond reimbursement of expenses

**Annual Operational Costs** 

Timum operational costs	
Lease for office space	\$144,000
Four automobiles	\$ 150,000
Petrol (7,500 avg. annual km approx. 3,000 liters @ \$1.75/liter)	\$5,250
Supplies and materials	\$ 50,000
Telephone, land lines	\$7,200
Cell phones	\$48,000
Utilities	\$ 30,000
Cleaning	\$ 12,000
Postage, overnight service	\$ 18,000
Office equipment	\$15,000
Monthly equipment maintenance fees	\$3,600
Printing	\$ 5,000
Transportation/travel (air/lodging/per diem)	\$25,000
Conferences	\$50,000
Training	\$100,000
Mileage reimbursement	\$3,000
Dues & subscriptions	\$ 2,500
Computer & other electronic equipment	\$45,000
Information system maintenance	\$18,000
Monthly remote network support	\$6,000
Uniform allowance (for enforcement officers)	\$2,000
Sub-total, Operational Expenditures	\$466,050

Source: The Innovation Group

The total estimated regulatory budget for ongoing operations is estimated at nearly \$2.2 million. This expense compares to an estimated \$113.9 million in gross gaming revenue for Scenario 2 from the Gaming Market Assessment portion of this report. The ratio of regulatory expenses to gross gaming revenue of 1.8% is slightly high relative to some U.S. jurisdictions, which typically have higher gross gaming revenue over which to spread regulatory costs. U.S. agencies expense ratios vary annually, with averages around 1% and range from around 0.4% in Nevada to 1.4% in New Jersey.

# APPLICATION OF FINDINGS TO THE CASE OF BERMUDA

The objective of the proposed introduction of casino gaming in Bermuda is based primarily on inducing tourist visitation by offering an activity that is important to a significant portion of the travelling public and which is present in many of Bermuda's competitors for leisure travel. As a result it is expected that this program will induce further visitation to Bermuda. Secondary goals include the generation of tax revenues to support more robust tourism initiatives.

Gaming, if established, will offer a complementary activity in Bermuda, where daytime activities such as golf and water sports are the primary activity. Based on interviews of hotel management and other tourism industry professionals, Bermuda formerly featured a higher level of entertainment and other evening activities. The drop in evening activities is a lost opportunity, in that some tourists will likely participate in gaming if it were available.

Casino operators in Bermuda will be in competition with well capitalized and long established casinos in the Bahamas and to a lesser extent throughout the Caribbean, as well as with other major gaming destinations (South Florida, Las Vegas, etc.). In addition, these markets have had the advantage of cultivating gamer loyalty over the past years. Bermuda will face the added challenge of the co-evolution of new regionally competitive jurisdictions such as Jamaica that will have similarly tourism-focused goals driving new casino policies. Thus, it is imperative that Bermuda focuses on establishing policies which maximize the potential competitiveness of the gaming industry.

In light of this situation, maximizing capital investment and thus the quality of the gaming product is especially important for Bermuda, given the country's primary goal of recognizing a sustainable increase in the competitiveness of its tourism product via the installation of casino gaming, and the level of direct competition which it faces. Policies which are most likely to drive the intended results are as follows:

## Maximize the Potential to Create an Attractive, Internationally Competitive Industry

- The jurisdictions with the lowest effective tax rates often feature the most elaborate casino developments, such as in Las Vegas, Atlantic City, Mississippi, and The Bahamas. The profit margins enabled will allow for attraction of significant initial capital investment and subsequent reinvestment. Thus, institute a low tax in the range of 10-15% to induce the maximum level of investment possible given market potential such that it would enhance tourism offerings through the development of internationally competitive gaming product. Depending on the desired effect, a graduated tax rate could start in the 10% range, allowing smaller operators a chance to compete, while an upper range of 15% would permit higher tax revenue while still supporting the government's partnership with the industry.
- Limit the number of major casinos to reduce competitive risk and encourage investment.

- Relevant to the size of the market opportunity, up-front license fees should be avoided. It would be advantageous, however, to design minimum investment criteria or component guidelines for major resort-casinos; or to encourage an equivalent enhanced investment profile through a competitive bid process. Minimizing licenses may have an added benefit unique among the case studies featured in this report. With a small number of unemployed people on the island, and relatively expensive operating costs, a limited number of facilities will stand a better chance of operating profitably and minimize the negative effects that could take place with excessive expansion. Excessive expansion, such as in Jamaica, did not lead to the growth in tourism which was the main goal of the enabling legislation.
- To the extent possible, limit direct restrictions on the casino operating environment. Minimize operating restrictions that would limit revenue potential and/or increase costs.

### Maximize Impact on the Greater Tourism Product

- Allow smaller casinos at hotels greater than 100 rooms to bolster development of new
  hotel supply (new rooms) and subsequently induce incremental international tourist
  visitation via hotel marketing efforts and the overall improvement of the tourism
  product. Economics will determine the number and size of these as per free market
  forces.
- A graduated tax will increase the probability that smaller amenity type casinos will develop at hotels.
  - Casinos operated in conjunction with hotels will be much more competitive in the
    region when it comes to inducing visitation. Many regular casino gamers that
    play in destination markets receive free or subsidized accommodations, food and
    beverage, and other resort amenities. Casinos located outside hotels will simply
    have a more difficult time competing regionally with properties in the Bahamas,
    Puerto Rico, Aruba, Las Vegas, and Atlantic City.
- Allow an independent casino to be developed to accommodate locals and tourists seeking
  a larger, more energetic gaming environment. This property would likely be larger and,
  not being in a hotel, would likely attract the majority of the local patronage. The property
  would also appeal to tourists seeking a gaming experience that are not staying at hotels
  offering casinos as well as hotel guests that may seek larger casinos that typically feature
  more energetic environments.

## Maximize Stability in Tax and Regulatory Environment

In order to create the stable market environment that will best induce the development of a healthy industry and long-term tourism benefits, offer a guaranteed period during which taxes would remain constant or within a set range.

In order to create both the reality and appearance of a transparent and legitimate industry to global gaming investors, operators, and patrons alike, it is imperative to create a strong regulatory and oversight mechanism (such as a properly empowered Gaming Control Board) which can enforce the operating guidelines established for the industry. Such an authority will ensure confidence among investors and fairness to gaming patrons. Furthermore, the authority will guarantee that there is no tint of corruption our criminal involvement within the jurisdiction. This is necessary to attract major international gaming companies with licenses in other jurisdictions, and also broadens the availability of debt financing to those companies. There are numerous models of regulatory structures throughout the world. For Bermuda, it is important to maintain a balance between having a solid reputation while not overly burdening operators with regulations that may make them non-competitive with other jurisdictions.

## Maintain a Healthy Gaming Industry

- A portion of annual tax revenues should be used directly to offset community costs and
  potential negative social impacts associated with the development of gaming.
- A portion of annual tax revenues should be earmarked for government based marketing and promotional efforts, targeting consumers who might see the presence of legalized gaming in Bermuda as a draw.
- Annual fees can be imposed to cover direct regulatory costs related to the industry, including costs associated with the existence of a Gaming Control Board.

#### Some additional considerations include:

- Provide for training of staff and rules that will allow the operators in Bermuda to provide
  the latest products from a technological perspective. Bermuda should not be behind U.S.
  jurisdictions in the types of games and systems allowed.
- Create a structure that allows for regulators to have a presence on the casino floor who
  are accessible and visible to the public.
- Develop a licensing process that is strict yet efficient by working with other jurisdictions, copying their approaches and having reciprocal arrangements to share data, especially for applicants who have received or been denied licenses in other jurisdictions. Ensure that there is adequately trained staff to allow for reasonable turnaround in license applications
- Create a Commission or Board made up of independent representatives serving staggering terms who are appointed by the Premier. This Commission should be established to include representatives with varied backgrounds (i.e. legal, accounting, social, etc) in an effort to bring various disciplines to the Commission.

# APPENDIX A: EXAMPLES OF GOVERNMENT USE OF GAMING TAX REVENUES

COLORADO	Local communities, historic preservation,			
	general fund			
ILLINOIS	Education assistance, local government			
INDIANA	Economic development, local government			
IOWA	Infrastructure improvements, local government, general fund, schools and universities, the environment, tourism			
LOUISIANA	General fund, city of New Orleans, public retirement systems, state capitol improvements, rainy day fund			
MICHIGAN	Public safety, capital improvements,			
	youth programs, tax relief, neighborhood			
	development and improvement, infrastructure repair and improvement			
MISSISSIPPI	Housing, education, transportation, health care			
	services, youth counseling programs, local			
	public safety programs			
MISSOURI	Education, local public safety programs,			
	compulsive gambling treatment, veterans'			
	programs, early childhood programs			
NEVADA	Education, local governments, general fund,			
	problem gambling programs			
NEW JERSEY	Senior citizens, disabled, economic			
Lichard Conces	revitalization programs			
PENNSYLVANIA	Property tax relief, economic development, tourism, horse racing industry, host local government			
SOUTH DAKOTA	Department of Tourism, County, gaming commission fund			
	ino-Style Taxes Are Spent			
DELAWARE	General fund			
FLORIDA	Statewide education			
IOWA	Infrastructure improvements, local			
	government, general fund, schools and			
arma.	universities, the environment, tourism			
MAINE	Education, health care, agriculture,			
	gambling control board administration			
NEW MEXICO	General fund, problem gambling treatment			
NEW YORK	Education			
OKLAHOMA	Education			
and the second s				

**PENNSYLVANIA** 

RHODE ISLAND

WEST VIRGINIA

government

General fund

Property tax relief, economic development,

tourism, horse racing industry, host local

Education, senior citizens, tourism

# Section V: Casino Gaming Market Assessment

## INTRODUCTION

The Innovation Group was retained by the Government of Bermuda and the Bermuda Hotel Association to provide an analysis of the potential for gaming on the island nation. Bermuda has been a tourist destination since Victorian times, and had become a popular tourist destination for people living in the northeastern United States and southeastern Canada. However, during an effort to diversify its economy, Bermuda's role as a financial hub and international business center has become the dominant sector in the economy. Tourism has declined for a number of reasons including increased competition from other destinations, particularly in the Caribbean, declining hotel inventory, declining pricing power in the airline industry within North America, and increased airfare for a declining number of available seats to and from Bermuda.

The primary goal of our engagement is to consider the potential of gaming to stimulate growth in tourism to Bermuda. However, a number of considerations arise from this broadly stated goal including what form of gaming will best stimulate tourism, where should gaming be permitted, and what parties should administer gaming? In order to broadly address these questions and considerations, The Innovation Group's engagement consists of the following elements:

- The Gaming Market Assessment which includes six scenarios for casino gaming in Bermuda and takes into consideration potential ownership structures, locations, and regulations for the industry.
- 2. The Gaming Legislation Study, which was coordinated with the Gaming Market Assessment, provides case studies and examples of gaming market structures from other jurisdictions and, combined with the results of the Gaming Market Assessment, provides input and recommendations into items the government should consider with regards to casino gaming legislation.
- Although a lottery typically does not induce tourism, the Lottery Assessment
  evaluated the potential tax revenue from a lottery that could be subsequently used to
  drive further tourism to Bermuda.
- The Overview of Internet Wagering provides background on the market, policies, technological considerations, and customer base for internet wagering.
- 5. A piece on Tax Considerations and Recommendations explores the implications of various tax structures and tax rates can have on casino gaming development and operations. The tax and legislative review were combined to offer a complete legal and regulatory perspective.
- 6. Finally, an Economic/Social Impact Evaluation estimates the economic benefits that can be derived within Bermuda by the introduction of casino gaming including not only the direct benefits that will accrue from operations, but also the indirect and induced benefits that will accrue from (and to) vendors and employees providing services to casino operations and their subsequent economic activity in the broader economy. The potential social impacts were explored including studies of public safety implications as witnessed in other jurisdictions, estimates of increased expenses for emergency services, and increased needs for community services including the

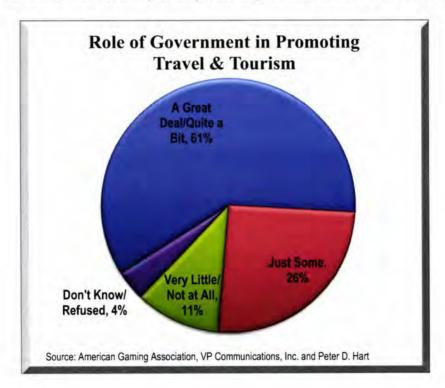
expansion of existing services and the need to institute programs addressing problematic gaming.

# GAMING AND TOURISM IN THE UNITED STATES

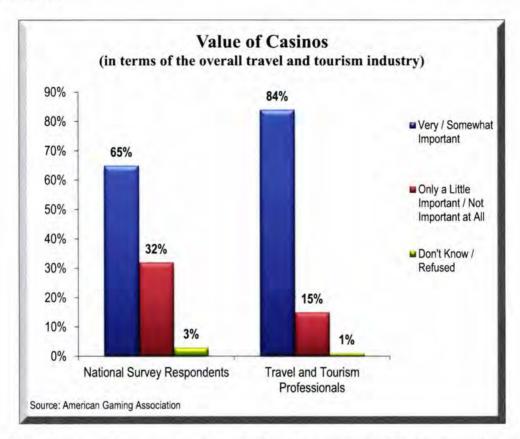
The primary goal of the Bermudian government in terms of evaluating gaming initiatives is whether the introduction of gaming would enhance the tourism industry. A number of jurisdictions around the world have been successful in utilizing gaming to bolster the tourism industry. In the following section we have summarized some data on casino gaming and its role in U.S. Tourism.

Gaming locations such as Las Vegas, Macau, Monte Carlo and others have demonstrated a strong connection between tourism and gaming. The following tables and charts include significant aspects of this correlation. The majority of this data is taken from the American Gaming Association's 2009 State of States report; a national survey which provides a comprehensive look at the U.S. commercial casino industry, including its effect on state and local communities and national economic and employment impact. The survey questioned a sample of the national population as well as travel and tourism professionals.

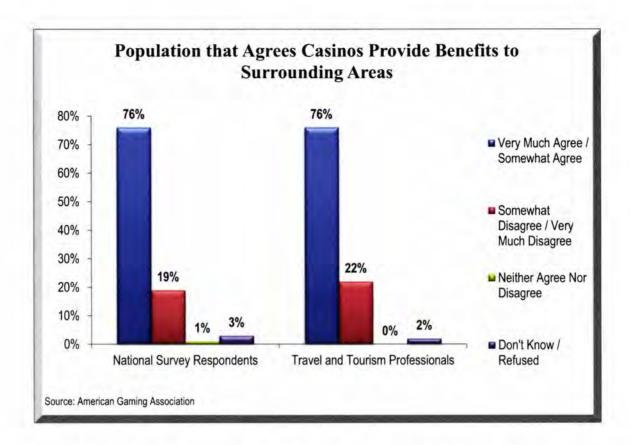
According to the report, approximately of 61% Americans believe that promoting domestic tourism can have A Great Deal/Quite a Bit of a positive effect on the U.S. Economy. Another 26% responded that promoting tourism would have at least some economic benefit to the US. This equates to approximately nine in ten respondents who believe there are at least some beneficial effects to the U.S. economy from promoting tourism as shown in the chart below.



The chart on the following page illustrates a comparison between National Survey Respondents and the Travel and Tourism Professionals concerning the value of casinos. In terms of the overall travel and tourism industry, approximately 65% of Americans feel that casinos are a very or somewhat important aspect of tourism industry. Among Travel and Tourism Professionals, this number jumps to approximately 84% revealing the strong importance of gaming in overall leisure and travel.

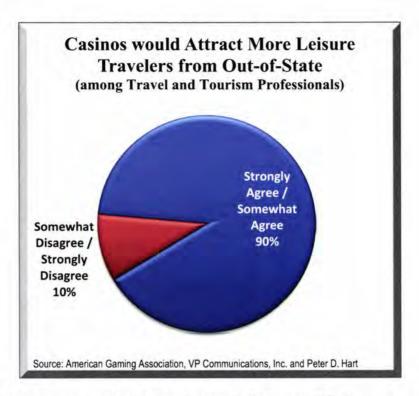


Additionally, all respondents were asked whether they agreed with the following statement: "Casino destinations attract tourists, and many of these people also visit other major sites in the surrounding areas, thereby helping the overall economy in the region." Interestingly approximately 76% of both National Survey Respondents and Travel and Tourism Professionals Very Much Agree / Somewhat Agree with that statement further cementing the overall positive view of casinos as part of a community.

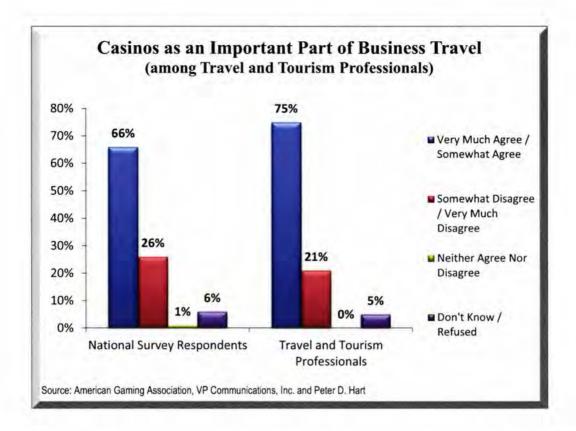


On a state or local level, responses among Travel and Tourism Professionals who currently do not have gaming in their state proved **extremely favorable to the effect of introducing casinos into their state.** When asked how much the casino resorts would increase tourism and economic development in their non gaming state, approximately 57% responded tourism would increase A Great Deal/Quite a Bit while another 26% responded tourism would increase at least some. This equates to over four in five respondents (83%) who say casinos will have at least some positive effect on tourism in the surrounding areas as shown in the chart on the following page.

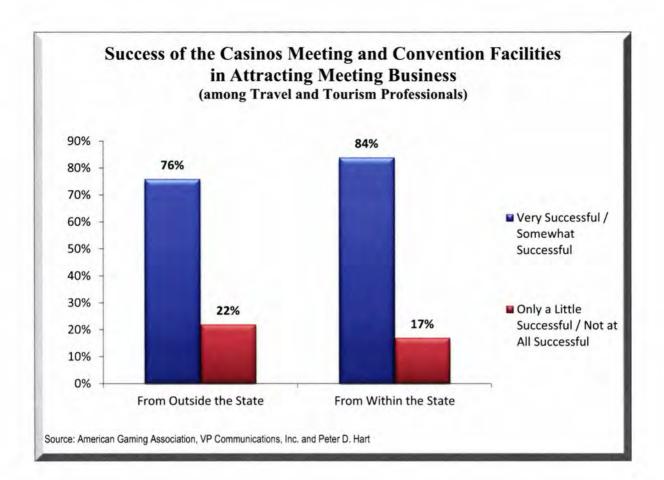
Displaying even more support for casinos, approximately 90% of Travel and Tourism Professionals agree with the statement that says, "if casinos were introduced, my state would be able to attract more leisure travelers from out-of-state." This has been shown in numerous gaming destinations across the Unites States including Las Vegas, Atlantic City, California, and numerous others.



When asked whether they agreed with the statement that says, "Casinos are a vital part of the business travel market because they host a large number of meetings and conventions each year", approximately 75% of Travel and Tourism Professionals and 66% of National Survey Respondents agreed with the statement. Obviously the national public is less in tune with the business travel market compared to Travel and Tourism Professionals which could account for the smaller percentage. Regardless, both represent strong numbers in favor of casinos as shown in the following chart.



Possibly one of the greatest economic benefits is the casinos ability to attract business travel, especially business travel from outside of their state. Las Vegas has proved extremely successful in this arena as they hosted nearly 22,500 conventions in 2008 that brought approximately 5.9 million conventions attendees to Las Vegas. These attendees not only attended their conventions, but also frequented neighboring casinos, food and beverage outlets, entertainment venues, among many others similar places. Even more important, they also accounted for the majority of midweek room nights, as the majority of conventions are held during the week. Among Travel and Tourism Professionals, 76% responded that casinos were Very Successful / Somewhat Successful in attracting business travel from outside the state while 84% said the casinos were Very Successful / Somewhat Successful in attracting business travel from within the state as shown in the chart on the following page.

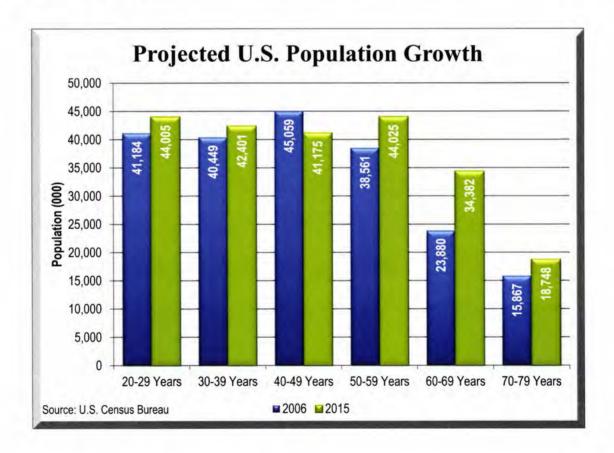


# LONG TERM OVERVIEW OF GAMING & TRENDS

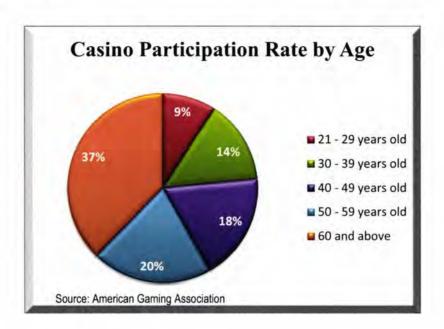
If Bermuda were to enact gaming legislation, another question that needs to be answered is whether the casino industry is sustainable in the long run. The Innovation Group expects that there are several converging trends, which bode well for the gaming industry in general in the near and intermediate term. These trends include demographic shifts and the overall acceptability of gaming by many U.S. adults.

# Demographic Shifts

The Baby Boomers are generally defined as those persons born between 1946 and 1963. This population segment has historically redefined purchasing habits in the U.S. because they comprise the largest segment of the population. Over the next 8 to 10 years, this group will be moving into the 50-59 and 60-69 age brackets. Consequently, these age brackets will be the fastest growing segment of the U.S. population. For example, the 50-59 year-old age group is expected to grow 14.2% and the 60-69 year-old age group is expected to grow 44.0% from 2006 to 2015 compared to only 9% growth for the entire U.S. population. The chart below illustrates the magnitude of this growth.

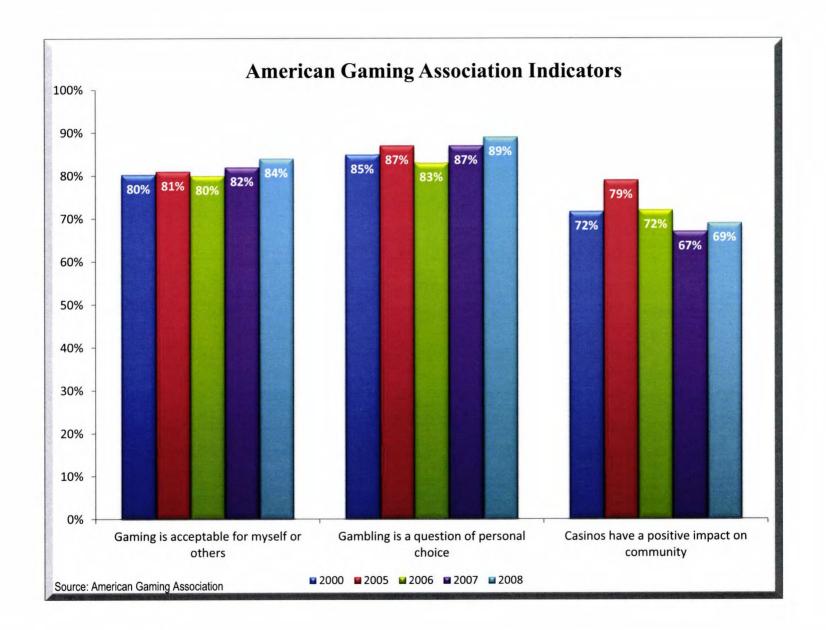


This trend in demographics bodes well for the gaming industry in particular. Not only does the Baby Boomer age group have the disposable time and income to travel, but according to the 2006 State of States Report: The AGA Survey of Casino Entertainment, they also have the highest gaming participation rates as shown in the table and chart below.



# Casino Acceptability

The following chart, which was taken from the American Gaming Association's ("AGA") 2009 State of The States report, shows how widely acceptable gaming has become in the U.S. In the U.S., 84% of Americans believe gaming is acceptable for themselves or others. Approximately 89% of those polled, up two percentage points from last year, believe gambling to be a personal choice that should be allowed without restrictions as to how people spend their disposable income. The majority of people, 69%, believe that casinos have a positive effect on the community and provide a good way to generate income without raising taxes, up two percentage points compared to last year. Overall, these figures are up significantly from the early to mid-1990's and reveal how acceptable and mainstream gaming has become today. The following chart illustrates the figures recently discussed:



# ECONOMIC AND DEMOGRAPHIC ANALYSIS

Since the local population, in addition to tourists, could potentially participate in any form of gaming introduced to Bermuda, an evaluation of the local population trends and economic considerations was completed. The following section summarizes recent demographic and economic data for Bermuda.

# Population

The 2000 Census reported that Bermuda was home to 62,131 people in 2000. The following table presents the Department of Statistics population estimate through 2011. A population of 64,209 was estimated for 2008 and is expected to grow slightly to 64,722 by 2011. The annual growth rate from 2000-2007 totaled 0.43% and is projected to slow to 0.28% from 2007 to 2011.

The adult population age 20 and older totaled 46,702 in 2000 and was estimated to grow to reach 49,160 in 2008 and 49,970 by 2011. Growth rates over this period for older portion of the population are greater than for the total population.

Bermuda Population: Mid-year Estimates

Year	Population	Change	Age 20+	Change
2000	62,131		46,702	
2001	62,455	0.52%	46,976	0.59%
2002	62,754	0.48%	47,249	0.58%
2003	63,042	0.46%	47,593	0.73%
2004	63,320	0.44%	47,936	0.72%
2005	63,571	0.40%	48,251	0.66%
2006	63,797	0.36%	48,552	0.62%
2007	64,009	0.33%	48,873	0.66%
2008	64,209	0.31%	49,160	0.59%
2009	64,395	0.29%	49,400	0.49%
2010	64,556	0.25%	49,665	0.54%
2011	64,722	0.26%	49,970	0.61%
A.A.G. 2000-2007	0.43%		0.65%	
A.A.G. 2007-2011	0.28%		0.56%	

Source: Bermuda Government Department of Statistics, Mid-Year Population Projections July 1, 2000 to July 1, 2030

# Economy

Bermuda's gross domestic product ("GDP") was nearly \$5.9 billion in 2007, a 9.3% increase compared to 2006. Inflation in 2007 was 3.8%, reflecting part of a global trend with roots in rising energy and agricultural prices. Even taking into consideration the inflation rate, growth in Bermuda was substantial. Growth does not appear to have been rooted in any particular industry or sector, but rather was broad based. The nation imports approximately \$1.1 billion more in goods than it exports, with the nearby United States being the source of 72% of imports.

Bermuda GDP				
	2005	2006	2007	
GDP (\$M)	\$4,857.0	\$5,354.7	\$5,855.0	
GDP per person	\$76,403	\$83,935	\$91,477	

Source: Government of Bermuda, Department of Statistics

The 9.3% rise in GDP was accompanied by a 9.0% rise in GDP per capita. Employment in Bermuda is somewhat broad-based, with International Business Activity employing an estimated 4,689 Bermudians in 2007, more than any other industry. Business services and public administration were the only other industries employing more than 4,000 employees. The construction, retail trade and repair services, and education, health, and social work industries each employ between 3,000 and 4,000 employees, with other industries employing less people. Employment in the hotel industry has dropped from 3,231 in 2005 to 2,965 in 2007, a loss of 266 jobs over the two year period. Overall, unemployment is said to be non-existent, with significant employment needs being met by foreigners.

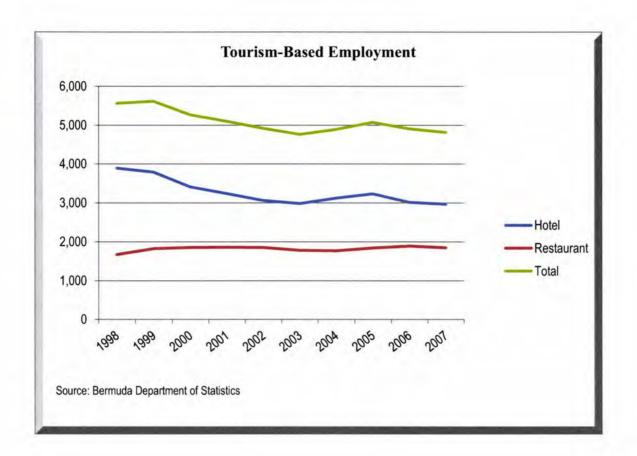
Jobs by Industry: Bermuda

	2005	2006	2007
Ag., Fishing & Quarrying	649	692	697
Manufacturing	1,003	965	935
Electricity, Gas & Water	390	372	394
Construction	3,494	3,653	3,54
Wholesale Trade & Motor Vehicles	1,406	1,513	1,51
Retail Trade & Repair Services	3,286	3,262	3,23
Hotels	3,231	3,012	2,96
Restaurants, Cafes & Bars	1,838	1,889	1,84
Transport & Communications	2,782	2,829	2,75
Financial Intermediation	2,859	2,902	2,95
Real Estate & Rent Services	535	518	61
Business Services	3,871	4,091	4,18
Public Administration	4,056	4,069	4,11
Education, Health & Social Work	3,122	3,221	3,25
Other Community, Social & Pers.	2,212	2,209	2,15
International Business Activity	4,213	4,489	4,68
Total	38,947	39,686	39,85

Source: Government of Bermuda, Department of Statistics

The recent global economic slowdown has had an impact in Bermuda. Given that several reports of layoffs surfaced during the fourth quarter, and that the international business and banking, insurance, and real estate sectors experienced the most significant declines, figures for the fourth quarter and early 2009 are expected to follow global trends in these industries. Sectors that featured growing wages, including business services and public administration and defense, are not expected to offset the impact of these significant segments of the economy. As the third quarter represents the most recent data available, and local trends appear to be following global economic trends for these important sectors, The Innovation Group has assumed that unemployment levels and incomes follow global trends this year and that a slow recovery starts in 2010.

Tourism is the second largest sector of the economy and employed 5,557 people in 1998. As visitation declined between 1998 and 2005, employment levels also dropped. While some jobs were created in 2005, and visitation increased, total employment has not recovered. In 2007, the most recent year for which data is available, 4,810 people were employed in the hotel and restaurant industries. This represents a 15.5% decline in employment for the industry between 1998 and 2007. Employment for the hotel and restaurant sectors is shown in the following graph:



# GAMING IN BERMUDA

Gaming in Bermuda currently consists of a lottery, sports betting, bingo, and table games offered during a limited cricket season. In the past, gaming machines actually existed due to some ambiguity in the law and became popular in the 1990's, when approximately 300 devices were being operated. In 1999, legislation stopped the importation of gaming devices and equipment, and in 2001, legislation prohibited the machines from operating.

## Lottery and Bingo

The Bermuda Lotteries Act of 1944 permits lotteries to be run, specifically including those incidental to entertainment, those run by societies and clubs, and those for charitable or benevolent purposes. These can include those run by hotels, businesses, and private lotteries, which are considered to be incidental to entertainment. Permits are required. However, the interpretation of the law appears to only require permits for those being run for charitable or benevolent purposes. As a general rule, monetary prizes are prohibited except in lotteries run by societies or clubs.

# Sports Betting

The Betting Act of 1975 permits licensed entities to take bets from the public. Three types of operating entities are enabled by the Act, a bookmaker, a pool betting agent, and a restricted bookmaker (restricted to fixed odds betting on the results of football or cricket matches). Betting is only permitted on licensed premises, and separate licenses for agents operating multiple locations. No intoxicating beverages can be served at any locations accepting sports bets.

According to the Government of Bermuda, Department of Finance, Office of the Tax Commissioner, \$1,570,000 in turf tax and \$195,000 in pools tax was collected in the fiscal year ending March 31, 2007. This tax was collected as a 20% surcharge on the amount wagered. Therefore, the turf tax, which consists of simulcast horse races, indicates that a total of \$7.85 million was wagered in fiscal year 2007. The pools tax, which is attributable to both American and English football games, implies that \$975,000 in wagers was placed during that same year.

## Caribbean Lottery

The Caribbean Lottery is operated by the Leeward Islands Lottery Holding Company ("LILHCo"), a subsidiary of GTECH, a large lottery facilitator and gaming machine designer and manufacturer. LILHCo was founded in 1994 and is based in Antigua and St. Croix. The Caribbean Lottery is the world's only multi-currency lottery and is run in eight jurisdictions as indicated below, including the technical relationship between LILHCo and the appropriate jurisdiction:

- Anguilla Caribbean Lottery (operator)
- Antigua and Barbuda/Antigua Caribbean Lottery (operator)
- St. Kitts and Nevis Caribbean Lottery (operator)
- St. Maarteen Caribbean Lottery (operator)
- Barbados Cricket Association "BIB MATCH" Lottery (vendor)

- U.S. Virgin Islands Caribbean Lottery (vendor)
- Turks and Caicos (vendor)
- Bermuda (super agent)

In Bermuda, Triple Crown, operated by Wendal Brown, is a super agent of the lottery. This allows Triple Crown to sell LILHCo lottery tickets and The Innovation Group was told that this ability was granted under Triple Crown's license granted under the Betting Act of 1975.

## Crown and Anchor

Crown and Anchor is a card game offered during cricket season. The game is most popular during the cricket championships held August 1 and 2, although it is offered on other occasions during the season and a total of about ten days annually. It is estimated that 15 to 20 tables are offered during the championship and a maximum of \$40,000 in wagers is put forth during a hand. Tables are consistently operated by organizations and individuals. The games have existed for some time, and although they do not appear to be strictly permitted by any legislation they are not expressly prohibited, either.

# TOURISM

The following section provides an overview of the Caribbean/Atlantic tourism environment and assesses the tourism market specific to Bermuda, as well as Caribbean markets for analytical and comparison purposes. Statistics provided in this section by the World Travel & Tourism Council ("WTTC") and the Caribbean Tourism Organization include Bermuda in figures for the Caribbean Region. Throughout this section of the report we will refer to the Caribbean as including Bermuda as it is a convention in the tourism industry despite its location in the Atlantic. The WTTC's forecasts are also provided only for illustrative purposes, and separate forecasts will be presented for forecasting purposes.

## Caribbean

Among the 13 regions ranked by the WTTC, the Caribbean's travel and tourism economy is ranked number one in relative contribution to national economies despite being ranked number 13 in absolute size worldwide. However, the WTTC's 10 year forecast ranks the Caribbean as number 13 in long-term growth.

This relatively low level of forecasted organic growth leaves growth prospects for any individual country, including Bermuda, with a few alternatives. Capturing increased market share or a significant portion of future growth are the most immediate sources of growth. Other sources include attracting visitation that would have accrued to other regions or inducing additional growth to Bermuda itself.

The contribution of travel & tourism to the gross domestic product<sup>8</sup> ("GDP") within the Caribbean Region, including Bermuda, is expected to rise from 14.8% (\$39.9 billion) in 2008 to 14.9% (\$69.9 billion) by 2018. Real GDP<sup>9</sup> growth for travel & tourism economy<sup>10</sup> is expected to be 2.1% in 2008 and 3.3% average annual growth rate ("A.A.G.") through 2018. Export<sup>11</sup> earnings from international visitors and tourism goods are expected to generate 18.2% of total exports (\$30.9 billion) in 2008, growing to 18.7% (\$54.7 billion) in 2018. The contribution of the travel & tourism economy to employment<sup>12</sup> is expected to rise from 2,148,000 jobs in 2008, which is 12.9% of the total employment in the Caribbean or 1 in every 7.8 jobs, to 2,692,000 jobs in 2018, which is forecast by the WTTC to be 13.8% of total employment or 1 in every 7.2 jobs by 2018.

The following chart shows actual visitation figures to the Caribbean from 1988 through 2008 and

9 Real GDP measures the value of all the goods and services produced expressed in the prices of a base year.

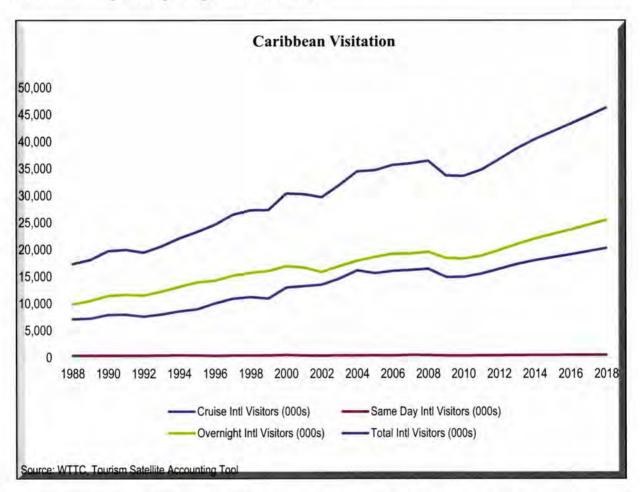
<sup>&</sup>lt;sup>8</sup> GDP is the value of all the goods and services produced in a country and is expressed in current prices.

<sup>&</sup>lt;sup>10</sup> The travel and tourism economy differs from the travel and tourism industry in that the latter captures the explicitly defined production-side "industry" equivalent, direct impact only, for comparison with all other industries, while the former captures the broader "economy-wide" impact, direct and indirect, of travel and tourism.

<sup>&</sup>lt;sup>11</sup> Export earnings from travel and tourism includes spending by international visitors on goods and services and non-visitor exports include consumer goods sent out-of-state for ultimate sale to visitors or capital goods sent out-of-state for use by industry service providers.

<sup>&</sup>lt;sup>12</sup> Travel and tourism economy employment includes jobs that involve contact with visitors, which are commonly referred to as travel and tourism industry employment, as well as jobs associated with industry suppliers, government agencies, manufacturing and construction of capital goods and exported goods used in travel and tourism, and supplied commodities.

forecasted figures for 2009 through 2018. As shown, overnight international visitors generate most visits. Overnight visitation to the Caribbean has shown consistent, gradual growth since 1988, with the exception of 2001 and 2002, which was part of a broader decline in tourism. The WTTC has forecasted a decline in overnight tourism in 2009 and 2010, with a slow recovery starting in 2012. Cruise visitation has also experienced consistent growth with the exception of 1999 and 2005. Cruise visitation is also expected to experience a decline over the next two years, followed by a consistent gradual increase through 2018, although not as strong as overnight visitation. Same-day visitation has remained consistent over the period in review and is not expected to incur any substantial change. Same-day visitation largely consists of travel between the islands and tourists arriving on personal boats for a day visit, as well as business travelers arriving and departing on the same day.



The A.A.G. between 1988 and 2008 for total visitation to the Caribbean is 3.78%, with cruise arrivals growing at 4.28% during this timeframe and overnight visitation increasing at 3.48%. Over the past five years, from 2003 to 2008, total visitation increased at an A.A.G. of 2.66% to 36.5 million arrivals. During this period, same day international visitors increased at an A.A.G. of 1.77% to account for approximately 431,000 tourists to the Caribbean in 2008. Total visitation peaked in 2008 with nearly 36.5 million visitors and is now forecasted to decline over the next few years. The WTTC forecast that total visitation will increase by a 3.58% A.A.G. between 2009 and 2018. During this timeframe, overnight visitation is expected to rise at a

3.69% A.A.G. and cruise arrivals are predicted to grow at an A.A.G. of 3.45%. The following table displays the actual figures for cruise arrivals, same day visitors, overnight visitation, and total number of tourists from 1988 through 2008, with forecasts for 2009 through 2018.

	Caribbean Visitation					
	Cruise International Visitors (000s)	Same Day International Visitors (000s)	Overnight International Visitors (000s)	Total Internationa Visitors (000s)		
1988	7,108	361	9,872	17,341		
1989	7,230	346	10,529	18,105		
1990	7,908	362	11,468	19,738		
1991	7,960	362	11,620	19,942		
1992	7,591	354	11,518	19,464		
1993	7,992	389	12,221	20,602		
1994	8,574	408	13,109	22,091		
1995	8,935	397	13,943	23,276		
1996	10,053	333	14,254	24,636		
1997	10,921	384	15,175	26,480		
1998	11,224	378	15,710	27,311		
1999	10,953	372	16,026	27,349		
2000	12,996	468	16,932	30,395		
2001	13,246	376	16,651	30,274		
2002	13,511	342	15,855	29,708		
2003	14,640	395	16,929	31,965		
2004	16,166	388	17,937	34,491		
2005	15,648	411	18,637	34,696		
2006	16,060	376	19,236	35,672		
2007	16,231	484	19,247	35,961		
2008	16,440	431	19,582	36,453		
2009 (f)	14,937	370	18,415	33,723		
2010 (f)	14,954	369	18,315	33,637		
2011 (f)	15,548	377	18,855	34,780		
2012 (f)	16,430	397	19,906	36,733		
2013 (f)	17,327	418	21,011	38,755		
2014 (f)	18,015	435	21,989	40,439		
2015 (f)	18,556	448	22,852	41,855		
2016 (f)	19,106	461	23,699	43,266		
2017 (f)	19,683	475	24,591	44,749		
2018 (f)	20,268	489	25,515	46,272		
AAG '88-'08	4.28%	0.89%	3.48%	3.78%		
AAG '03-'08	2.35%	1.77%	2.95%	2.66%		
AAG '09-'18	3.45%	3.13%	3.69%	3.58%		

Source: WTTC; Tourism Satellite Accounting Tool

(f) - Forecasts

The following table displays the most recently compiled detailed information on tourist arrivals across the Caribbean and includes the total number of tourist stop-over arrivals to Caribbean countries and two additional destinations located in Mexico. Cozumel, Mexico and Dominica

did not report full year data for 2007. As shown, the Dominican Republic led all Caribbean destinations with nearly 4.0 million arrivals, which was a 0.4% increase over 2006. Cuba and Cancun, Mexico received the second and third most tourists, with approximately 2.2 million and 2.0 million arrivals, respectively. Visitation to Cuba declined by 3.1% in 2007, while Cancun's arrivals increased by 27.4%. Other countries receiving over one million visitors were Jamaica with 1.7 million, Bahamas with over 1.5 million, and Puerto Rico with approximately 1.4 million. In addition to Cancun, other Caribbean destinations that experienced significant growth in annual arrivals include Curacao with a 27.9% increase and St. Eustatius with 20.7% growth. St. Vincent and Grenadines had the greatest drop in visitation at 8.0%. Visitation to Puerto Rico declined by 5.9% and St. Lucia had a 5.0% drop.

In total, there were 19,068,726 stay-over arrivals to the Caribbean Region, including Bermuda, in 2007, with Dominica and Cozumel not reporting for the entire year. Among the 30 countries representing the Caribbean Region, as shown in the following table, the six top destinations, in terms of overnight visitation, received 66.83% of stay-over arrivals in 2007, which is equivalent to 12,743,595 tourists. There were 22 destinations that received less than their fair share of the market, which would be 3.33% with 30 destinations. These 22 destinations recorded received 4,859,686 overnight visitors in 2007, which is 25.49% of the Caribbean Region's total.

In 2007, Bermuda received 1.60% of tourist stop-over arrivals visiting the Caribbean Region. Among the 30 countries shown in the following table, 16 received fewer stop-over arrivals than Bermuda. Bermuda's overall visitation increased by 2.2% in 2007, compared to 2006, with a strong winter tourist season that had arrivals increase by 8.7%. Bermuda's 2007 summer season remained consistent with 2006 figures, increasing by only 0.3%. Overall, this relatively low level of visitation represents an opportunity in that there is significant market share to be gained.

Tourist (stop-over) Arrivals in 2007

Destination	Period	Tourist Arrivals	% of		% Change	9
Destination	renod	Tourist Arrivals	<b>Total Visitors</b>	Overall	Winter#	Summer#
Anguilla	Jan-Dec	77,652	0.41%	6.4	13.4	1.8
Antigua & Barbuda *	Jan-Dec	261,786	1.37%	3.2	-1.5	6.2
Aruba	Jan-Dec	772,073	4.05%	11.2	7.2	13.3
Bahamas	Jan-Dec	1,527,622	8.01%	-4.6	-7.0	-3.1
Barbados P	Jan-Dec	574,576	3.01%	2.1	0.1	3.3
Belize P	Jan-Dec	251,655	1.32%	1.8	2.2	1.5
Bermuda	Jan-Dec	305,548	1.60%	2.2	8.7	0.3
Bonaire	Jan-Dec	74,309	0.39%	16.9	10.7	20.5
British Virgin Islands P	Jan-Dec	358,056	1.88%	0.5	1.0	0.2
Cancun (Mexico) **	Jan-Dec	2,022,302	10.61%	27.4	56.6	14.6
Cayman Islands	Jan-Dec	291,503	1.53%	9.1	8.3	9.5
Cozumel (Mexico) **	Jan-Feb	57,075	0.30%	35.1	35.1	1
Cuba	Jan-Dec	2,152,221	11.29%	-3.1	-8.3	1.0
Curacao	Jan-Dec	299,782	1.57%	27.9	9.5	37.9
Dominican Republic *	Jan-Dec	3,979,582	20.87%	0.4	1.4	-0.3
Dominica	Jan-Aug	54,606	0.29%	-3.6	-3.6	-3.6
Grenada P	Jan-Dec	129,118	0.68%	9.0	8.0	9.6
Guyana	Jan-Dec	131,487	0.69%	15.9	7.4	20.3
Jamaica	Jan-Dec	1,700,785	8.92%	1.3	-3.7	4.1
Martinique P	Jan-Dec	503,107	2.64%	0.0	6.0	-3.8
Montserrat	Jan-Dec	7,745	0.04%	-2.7	-9.7	1.0
Puerto Rico **	Jan-Dec	1,361,083	7.14%	-5.9	-8.0	-4.4
Saba	Jan-Dec	11,673	0.06%	6.0	0.7	9.6
St. Lucia	Jan-Dec	287,435	1.51%	-5.0	-8.9	-2.7
St. Eustatius	Jan-Dec	11,568	0.06%	20.7	18.8	21.7
St. Maarten*	Jan-Dec	469,407	2.46%	0.3	-1.5	1.6
St. Vincent & Grenadines	Jan-Dec	89,637	0.47%	-8.0	-3.9	-10.3
Suriname P	Jan-Dec	162,509	0.85%	5.5	3.2	6.5
Trinidad & Tobago	Jan-Dec	449,452	2.36%	-1.7	-5.5	0.3
US Virgin Islands	Jan-Dec	693,372	3.64%	3.3	-5.1	9.3

Source: Caribbean Tourism Organization - Data supplied by member countries and available as of October 22, 2008

Note: Figures are subject to revision by reporting countries

The following table displays tourist arrivals to Caribbean destinations by source market for 2007. The United States is the top source market to the Caribbean Region, including Bermuda. In 2007, tourists from the United States accounted for nearly 9.04 million overnight visitations to the Caribbean, or 49.80% of all arrivals. Canada generated 1.98 million overnight arrivals to the Caribbean Region, or 10.91%, and Europe produced nearly 4.11 million visitors, or 22.64%. All other markets combined to account for approximately 3.04 million overnight tourists to the Caribbean Region in 2007, or 16.74% of total annual visitation.

As shown in the overnight tourist arrivals by source market table, there are five Caribbean destinations that hosted over one million visitors from the United States in 2007, the Bahamas,

<sup>\*:</sup> Non-Resident Air Arrivals

<sup>\*\*:</sup> Non-Resident Hotel registrations only

P: Preliminary figures

<sup>#:</sup> Winter - Jan to Apr; Summer -May to Dec

Cancun, Dominican Republic, Jamaica, and Puerto Rico. Among the other source markets, only the Dominican Republic received over one million visitors from Europe.

In 2007, the United States accounted for 229,498 overnight arrivals to Bermuda. Bermuda's second largest source market was Europe, with 35,938 visitors, followed by Canada with 27,844. Growth from Europe was significant due to a temporary addition of air service from a low cost carrier but unfortunately that service is no longer being operated. All other markets combined generated 12,268 overnight arrivals to Bermuda in 2007.

Tourist (stop-over) Arrivals by Main Market - 2007

D. M. Mar	Davis	United S	States	Cana	da	Euro	ре	Oth	er	Tota	al
Destination Period		Tourists	% ch.	Tourists	% ch.						
Anguilla	Jan-Dec	45,974	3.3	2,393	21	10,795	17.1	18,490	7	77,652	6.4
Antigua & Barbuda *	Jan-Dec	78,697	7.1	10,489	4.3	115,448	8.4	57,152	-10.1	261,786	3.2
Aruba	Jan-Dec	520,385	5.5	25,673	13.6	67,353	8.6	158,662	36.2	772,073	11.2
Bahamas	Jan-Dec	1,263,591	-7.4	100,335	18.5	87,165	6	76,531	11.1	1,527,588	-4.6
Barbados P	Jan-Dec	134,041	2.5	53,239	8.2	251,832	4.5	135,464	-4.4	574,576	2.1
Belize P	Jan-Dec	152,567	0	16,655	7.1	34,173	-0.6	48,260	7.5	251,655	1.8
Bermuda	Jan-Dec	229,498	0.8	27,844	0.6	35,938	11.1	12,268	9.3	305,548	2.2
Bonaire	Jan-Dec	32,085	19.8	1,716	13.6	31,427	11.4	9,081	28.8	74,309	16.9
Cancun (Mexico) **	Jan-Dec	1,571,703	24.2	117,081	46.6	209,407	25.2	124,111	66.1	2,022,302	27.4
Cayman Islands	Jan-Dec	231,865	6.7	17,355	16.4	20,267	21.2	22,016	20.5	291,503	9.1
Cuba	Jan-Dec	-		660,384	9.3	924,025	2.2	567,812	-20.3	2,152,221	-3.1
Curacao	Jan-Dec	46,212	-2.6	6,898	-7.1	121,429	16.5	125,245	66.3	299,784	27.9
Dom Republic *	Jan-Dec	1,080,066	-1.1	587,370	15.3	1,387,476	-2.7	924,670	-1.4	3,979,582	0.4
Dominica	Jan-Aug	16,130	7.5	1,895	26.7	7,852	3.1	27,729	-11.6	54,606	-3.6
Grenada	Jan-Dec	27,136	0.1	6,017	-5	41,792	28.6	54,173	3.1	129,118	9
Guyana	Jan-Dec	68,861	20.4	19,508	33.8	9,686	15.4	33,432	0.4	129,118	9
Jamaica	Jan-Dec	1,132,532	-4.9	190,650	24.1	288,894	12.8	88,709	12.9	1,700,785	1.3
Montserrat	Jan-Dec	2,109	-2	388	-1.8	2,365	-5.4	2,883	-1.1	7,745	-2.7
Puerto Rico **	Jan-Dec	1,205,598	-5.7	16,821	1.7	35,668	-12.2	102,996	-7	1,361,083	-5.9
Saba	Jan-Dec	4,466	9.5	744	17.5	5,287	2.1	1,176	4.7	11,673	6
St Lucia	Jan-Dec	113,433	-3.4	18,640	6.6	88,828	3.8	66,506	-18.9	287,435	-5
St. Eustatius	Jan-Dec	2,738	24.1	229	65.9	5,893	21.5	2,708	13.4	11,568	20.7
St. Maarten *	Jan-Dec	253,831	3.2	32,350	5.6	96,365	-0.7	86,861	-7.6	469,407	-5
St. Vincent & G'dines	Jan-Dec	26,642	-6.8	6,745	3.1	23,454	6.8	32,796	-18.7	89,637	-8
Suriname P	Jan-Dec	4,573	4.5	1,226	-4.7	108,134	9.5	48,576	-2.1	162,509	5.5
Trinidad & Tobago	Jan-Dec	180,557	5.5	51,411	4.6	82,511	-1.8	134,973	-11.8	449,452	-1.7
U S Virgin Islands **	Jan-Dec	612,197	1.1	6,017	14.2	14,881	-1.3	74,934	-38.1	693,372	3.3
Total/ % of Total		9,037,487	49.80%	1,980,073	10.91%	4,108,345	22.64%	3,038,214	16.74%	18,148,087	100.00%

Source: Data supplied by member countries and available as of October 22, 2008 through the Caribbean Tourism Organization \*:Non-Resident Air Arrivals; \*\*:Non-Resident Hotel registrations only

Note: U.S.V.I reported figures in this tables are Hotel Registrations whereas they reported Stay Over totals are Air Arrivals

<sup>1</sup> USA total included in Other

The following table displays market share within the Caribbean Region, including Bermuda, for 2007. Within the table, market share is shown according to source market and in relation to the Caribbean Region's total visitation for 2007. Market share by source market shows that the top Caribbean destinations for tourists travelling from the United States are Cancun, the Bahamas, Puerto Rico, Jamaica, and the Dominican Republic. These markets each attracted over ten percent of the market among the 27 destinations displayed. The U.S. Virgin Islands and Aruba also received a significant amount of the United States market. Bermuda was the tenth most visited destination market among U.S. tourists.

Cuba and the Dominican Republic are the top destinations for Canadian travelers staying overnight in the Caribbean. These two destinations account for 63.02% of Canada's arrival in the Caribbean Region. Among travelers from Europe, Cuba and the Dominican Republic are also the two top destinations, accounting for 56.26% of overnight arrivals combined. Jamaica is the third most visited Caribbean destination for both the Canadian and European markets. Bermuda is the ninth most visited Caribbean destination for the Canadian market and is tied for fourteenth with Puerto Rico among European overnight visitors.

Market Share of Tourist Arrivals by Market, 2007

	Percentag	e of Source	Market's To	otal	Percenta	age of Carib	bean Total		Total
	United States	Canada	Europe	Other	United States	Canada	Europe	Other	TOLAI
Anguilla	0.51%	0.12%	0.26%	0.61%	0.25%	0.01%	0.06%	0.10%	0.43%
Antigua & Barbuda *	0.87%	0.53%	2.81%	1.88%	0.43%	0.06%	0.64%	0.31%	1.44%
Aruba	5.76%	1.30%	1.64%	5.22%	2.87%	0.14%	0.37%	0.87%	4.25%
Bahamas	13.98%	5.07%	2.12%	2.52%	6.96%	0.55%	0.48%	0.42%	8.42%
Barbados P	1.48%	2.69%	6.13%	4.46%	0.74%	0.29%	1.39%	0.75%	3.17%
Belize P	1.69%	0.84%	0.83%	1.59%	0.84%	0.09%	0.19%	0.27%	1.39%
Bermuda	2.54%	1.41%	0.87%	0.40%	1.26%	0.15%	0.20%	0.07%	1.68%
Bonaire	0.36%	0.09%	0.76%	0.30%	0.18%	0.01%	0.17%	0.05%	0.41%
Cancun (Mexico) **	17.39%	5.91%	5.10%	4.08%	8.66%	0.65%	1.15%	0.68%	11.14%
Cayman Islands	2.57%	0.88%	0.49%	0.72%	1.28%	0.10%	0.11%	0.12%	1.61%
Cuba	-	33.35%	22.49%	18.69%		3.64%	5.09%	3.13%	11.86%
Curacao	0.51%	0.35%	2.96%	4.12%	0.25%	0.04%	0.67%	0.69%	1.65%
Dom Republic *	11.95%	29.66%	33.77%	30.43%	5.95%	3.24%	7.65%	5.10%	21.93%
Dominica	0.18%	0.10%	0.19%	0.91%	0.09%	0.01%	0.04%	0.15%	0.30%
Grenada	0.30%	0.30%	1.02%	1.78%	0.15%	0.03%	0.23%	0.30%	0.71%
Guyana	0.76%	0.99%	0.24%	1.10%	0.38%	0.11%	0.05%	0.18%	0.71%
Jamaica	12.53%	9.63%	7.03%	2.92%	6.24%	1.05%	1.59%	0.49%	9.37%
Montserrat	0.02%	0.02%	0.06%	0.09%	0.01%	0.00%	0.01%	0.02%	0.04%
Puerto Rico **	13.34%	0.85%	0.87%	3.39%	6.64%	0.09%	0.20%	0.57%	7.50%
Saba	0.05%	0.04%	0.13%	0.04%	0.02%	0.00%	0.03%	0.01%	0.06%
St Lucia	1.26%	0.94%	2.16%	2.19%	0.63%	0.10%	0.49%	0.37%	1.58%
St. Eustatius	0.03%	0.01%	0.14%	0.09%	0.02%	0.00%	0.03%	0.01%	0.06%
St. Maarten *	2.81%	1.63%	2.35%	2.86%	1.40%	0.18%	0.53%	0.48%	2.59%
St. Vincent & G'dines	0.29%	0.34%	0.57%	1.08%	0.15%	0.04%	0.13%	0.18%	0.49%
Suriname P	0.05%	0.06%	2.63%	1.60%	0.03%	0.01%	0.60%	0.27%	0.90%
Trinidad & Tobago	2.00%	2.60%	2.01%	4.44%	0.99%	0.28%	0.45%	0.74%	2.48%
U S Virgin Islands **	6.77%	0.30%	0.36%	2.47%	3.37%	0.03%	0.08%	0.41%	3.82%
Total	100.00%	100.00%	100.00%	100.00%	49.80%	10.91%	22.64%	16.74%	100.00%

Source: Data supplied by member countries and available as of October 22, 2008 through the Caribbean Tourism Organization, The Innovation Group \* Non-Resident Air Arrivals; \*\*Non-Resident Hotel registrations only

Note: U.S.V.I reported figures in this tables are Hotel Registrations whereas they reported Stay Over totals are Air Arrivals

<sup>1</sup> USA total included in Other

According to the Caribbean Tourism Organization, visitation from January through October, 2008 to Caribbean destinations generated from Europe grew at a 3.0% A.A.G. since 2002.

The Caribbean Tourism Organization reported significant growth at the beginning of 2008, but as oil prices began to surge, visitation began to slow. The 2008/2009 winter is forecasted for declining visitation from the European market. According to the Caribbean Tourism Organization, visitation to the Caribbean from the United States grew at a 2.8% A.A.G. since 2002 and is up by 1.5% for the period between January and July, 2008. Concerns about the United States market include the airline industry's performance in response to unexpected hikes in oil prices, the elimination of flight capacity, and the broader global economic slowdown. For example, American Airlines reduced seating capacity and significantly raised fares from September, 2007 through January, 2008. In contrast, according to the Caribbean Tourism Organization, Air Jamaica, Delta and Continental all increased seating capacity. Overall, through the first half of 2008, the Caribbean Tourism Organization states that tour operators have seen lower bookings in most categories except cruises, which have been comparable to last year. Canadian visitation to the Caribbean has grown at an A.A.G. of 10.4% between 2002 and 2007 and increased 17.7% for the period between January and July 2008. While final data on the 2008/2009 winter season is not yet available, all news accounts and early reports indicate that visitation slowed relative to the same period a year earlier.

Tourist Arrivals by Main Market - 2008, with Year-to-Date Comparisons to 2007

Destination	Period	United S	tates	Cana	da	Europ	е	Othe	er	Tota	1
- 1-20 X 27 X X X		Tourists	% ch.	Tourists	% ch.	Tourists	% ch.	Tourists	% ch.	Tourists	% ch.
Anguilla	Jan-Apr	18,344	-15.3	1,077	-8.9	3,490	-22.5	5,262	-1.9	28,173	-13.9
Antigua & Barbuda *	Jan-Sep	66,684	13.2	10,035	36.9	81,534	-2.7	45,488	4.2	203,741	5.2
Bahamas	Jan-Jun	691,347	-4.0	70,668	26.2	44,718	9.5	42,029	24.1	848,762	-0.2
Barbados P	Jan-Jun	67,677	-2.1	31,722	3.6	130,961	3.0	60,074	-12.8	290,434	-1.8
Belize P	Jan-Aug	114,624	-1.8	13,329	11.6	24,451	3.0	31,729	-3.1	184,133	-0.6
Bermuda	Jan-Aug	148,869	-12.2	20,703	10.8	26,135	8.6	9,427	16.0	205,134	-6.9
Bonaire	Jan-Jun	17,727	8.7	1,317	29.9	16,177	3.0	4,655	18.4	39,876	7.9
Cancun (Mexico) **	Jan-Aug	1,223,224	6.0	100,687	4.9	158,982	4.8	110,517	24.5	1,593,410	6.9
Cayman Islands	Jan-Aug	186,126	9.9	13,381	15.5	14,935	8.5	15,516	5.4	229,958	9.8
Cuba 1	Jan-Aug	-		617,405	28.1	648,422	2.2	427,227	13.7	1,693,054	13.5
Curacao	Jan-Jun	24,873	4.0	4,745	12.4	67,518	11.1	84,868	101.7	182,004	38.9
Dom Republic *	Jan-Sep	888,734	2.2	497,523	11.2	1,053,274	-0.4	687,028	0.4	3,126,559	2.2
Grenada	Jan-May	14,215	17.7	3,854	29.2	23,523	18.4	14,947	-32.6	56,539	-1.0
Guyana	Jan-May	18,181	-30.9	6,911	-16.3	3,120	-26.4	10,378	-21.6	38,590	-25.8
Jamaica	Jan-Aug	842,438	3.7	163,880	23.9	195,434	0.0	65,514	12.3	1,267,266	5.7
Montserrat	Jan-Jul	1,212	1.5	227	1.3	1,205	-4.1	1,466	-7.6	4,110	-3.5
Puerto Rico **	Jan-Jul	770,641	-0.6	10,964	-1.6	17,750	-26.3	54,312	-10.6	853,667	-2.0
Saba	Jan-Jul	2,991	-3.8	495	3.6	3,558	6.8	828	16.0	7,872	3.1
St Lucia	Jan-Sep	88,856	3.5	19,159	43.6	72,598	9.4	50,176	-4.0	230,789	5.9
St. Eustatius	Jan-Jul	1,663	-3.8	165	5.1	3,754	9.2	1,564	1.0	7,146	4.0
St. Maarten	Jan-Jun	155,527	6.0	21,258	5.0	52,472	6.1	40,101	1.1	269,358	5.2
St. Vincent & the G'dines	Jan-Jul	15,743	-15.8	4,360	-1.7	14,168	-8.6	18,353	-9.9	52,624	-10.8
Trinidad & Tobago	Jan-Mar	50,935	11.6	17,803	32.1	18,612	-28.0	35,006	14.2	122,356	5.8
U S Virgin Is.	Jan-Jul	445,975	5.9	5,359	24.5	9,491	3.5	20,540	-37.2	481,365	3.0

Source: Data supplied by member countries and available as at October 22, 2008

Note: U.S.V.I reported figures in this tables are Hotel Registrations whereas they reported Stay Over totals are Air Arrivals

<sup>\*</sup> Non-Resident Air Arrivals

<sup>\*\*</sup>Non-Resident Hotel registrations only

<sup>1</sup> USA total included in Other

The most recently available Caribbean cruise passenger arrivals for 2007 and 2008 are displayed in the following table. As shown, the Bahamas was the top destination for Caribbean cruise passengers in 2007 and 2008, despite a 4.3% decline in arrivals. From January through June, 2008, the Bahamas received nearly 1.5 million cruise arrivals. The US Virgin Islands is ranked second, with just over 1.3 million cruise passengers in 2008, a 4.5% decline compared to 2007. The only other Caribbean destination to receive over one million cruise arrivals is the Cayman Islands, with just below 1.1 million in 2008, a 12.4% decrease compared to 2007. From January through August, 2008, Bermuda's cruise arrivals declined by 17.9% compared to 2007, which is the second largest decline among Caribbean port destinations. Relative to other destinations, Bermuda is popular with vessels departing from ports along the Northeastern United States. St. Vincent and the Grenadines experienced the highest percentage decline in cruise visitation between 2007 and 2008, with a 31.8% drop. Bonaire experienced the highest growth percentage at 116.1%, bringing their figure to 95,613 for 2008. The Dominican Republic and Aruba both experienced significant increases in cruise arrivals, with increases of 37.6% and 23.1%, respectively.

Among the 20 destinations classified in the Caribbean Region that reported cruise passenger arrivals, there was a 0.94% decline in total cruise arrivals between 2007 and 2008. In 2007, there were nearly 9.80 million cruise tourists and in 2008 the figure dropped to approximately 9.70 million. Six out of the twenty destinations received above their fair share (5.0%) of cruise passenger arrivals in 2008, accounting for 60.85% of the total or just above 5.90 million tourists. In 2007, the same six destinations received above their fair share of cruise passenger visitations and combined for 63.59% of the total number of cruise arrivals or nearly 6.23 million tourists. Between 2007 and 2008, the top six Caribbean cruise destinations experienced a 5.21% decrease in cruise arrivals, with their combined total declining by 2.74 percentage points. The total market experienced a 0.94% decrease between 2007 and 2008. This indicates that the top six destinations' command of the cruise market is declining as other participating markets grow their share.

Cruise Passenger Arrivals - 2008 & 2007

Destination	Period	2008	% of Arrivals	2007	% of Arrivals	% ch.
Antigua & Barbuda	Jan-Jul	383,993	3.96%	420,736	4.30%	-8.7
Aruba	Jan-Aug	369,085	3.80%	299,784	3.06%	23.1
Bahamas	Jan-Jun	1,484,311	15.30%	1,551,172	15.84%	-4.3
Barbados	Jan-Jun	376,670	3.88%	326,347	3.33%	15.4
Belize P	Jan-Sep	432,646	4.46%	460,928	4.71%	-6.1
Bermuda	Jan-Aug	225,937	2.33%	275,349	2.81%	-17.9
Bonaire	Jan-Apr	95,613	0.99%	44,246	0.45%	116.1
British Virgin Is.	Jan-Jul	398,266	4.11%	347,990	3.55%	14.4
Cayman Islands	Jan-Aug	1,097,369	11.31%	1,252,013	12.78%	-12.4
Curacao	Jan-Jun	201,735	2.08%	204,326	2.09%	-1.3
Dominica	Jan-Jul	236,424	2.44%	216,166	2.21%	9.4
Dominican Republic	Jan-Aug	351,052	3.62%	255,105	2.60%	37.6
Grenada	Jan-May	181,162	1.87%	163,057	1.67%	11.1
Jamaica	Jan-Jul	715,424	7.37%	766,073	7.82%	-6.6
Martinique P	Jan-Jul	51,717	0.53%	46,778	0.48%	10.6
Puerto Rico	Jan-Mar	530,653	5.47%	490,231	5.01%	8.2
St. Lucia	Jan-Sep	426,097	4.39%	405,444	4.14%	5.1
St. Maarten	Jan-Jun	772,533	7.96%	803,221	8.20%	-3.8
St. Vincent & the Grenadines	Jan-Jul	67,536	0.70%	99,046	1.01%	-31.8
US Virgin Islands	Jan-Sep	1,302,911	13.43%	1,365,011	13.94%	-4.5

Source: Caribbean Tourism Organization; Data supplied by member countries and available as of October 27, 2008

### Bermuda

The WTTC ranks the Bermuda travel & tourism economy number 124 out of 176 countries in absolute size worldwide, but number 46 in relative contribution to national economies. The WTTC also ranked Bermuda 120 in long-term (10-year) growth. As part of the Caribbean, Bermuda commands a relatively small share of overall visitation to the region, particularly given its proximity to major sources such as the Northeast, Mid-Atlantic, and Ontario, Canada. In addition to the global economic slowdown, the island faces unique challenges including declining tourism infrastructure and a weather pattern that is consistent with its main source markets rather than complementary.

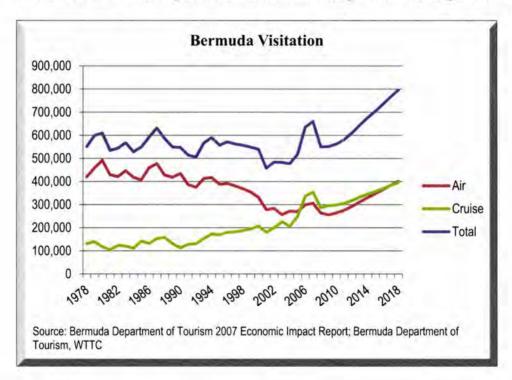
According to the WTTC, the contribution of travel & tourism to the gross domestic product ("GDP") in Bermuda is expected to rise from 14.7% (\$867.7 million) in 2008 to 17.8% (\$1,806.2 million) by 2018. Real GDP growth for the travel & tourism economy is expected to be 1.4% in 2008, and is forecast to increase at a 4.5% A.A.G. through 2018. Export earnings from international visitors and tourism goods are expected to generate 17.1% (\$582.4 million) of Bermuda's total exports in 2008. The WTTC forecasts that exports earnings will increase to 23.3% (\$1,316.6 million) of Bermuda's total in 2018. The contribution of the travel & tourism economy in Bermuda is expected to create a rise in employment levels. According to the WTTC, 7,000 jobs are credited to the tourism economy in 2008, which is 17.4% of total

P: Preliminary figures

N.B: Figures are subject to revision by reporting countries

employment or 1 in every 5.7 jobs, and by 2018 that figure is forecast to rise to 9,000 jobs, which will be 21.6% of the total expected employment or 1 in every 4.6 jobs.

The following chart displays air, cruise, and total visitation to Bermuda from 1978 to 2008, as well as the WTTC forecasted arrivals from 2009 through 2018. As shown, air arrivals fluctuated until 1996, when a gradual decline took place through 2002. Air visitation increased in 2006 and 2007, which was the first two year increase since 1993 and 1994. Growth in cruise visitation experienced fluctuations until 1991, when a period of gradual increase took hold through 2000. Since 2004, cruise arrivals have increased substantially. Over the past three years, cruise visitation exceeded air arrivals, which had not occurred over the past 20 years. Overall, since 2004, total arrivals have increased annually, largely due growth in cruise arrivals. Total visitation experienced record highs in 2006 and 2007, surpassing the previous record of 631,314 in 1987. However, 2008 represented a 16.6% decline in tourism. The WTTC's forecast for 2009 through 2018 shows a near-term stagnant tourism market with growth resuming in 2010.



The following table shows the actual figures for air, cruise, and total visitation to Bermuda and the WTTC forecasted arrivals for 2009 through 2018. As presented in the table, since 1979, air arrivals to Bermuda declined by an A.A.G. of 1.54% while cruise arrivals increased by an A.A.G. of 2.62%, resulting in total visitation remaining somewhat stagnant. Between 1998 and 2008, air arrivals decreased at an A.A.G. of 2.38% and cruise passenger arrivals increased by an A.A.G. of 3.01%, with overall visitation experiencing a negative 0.31% A.A.G. In 2008, there were 263,613 air arrivals and 286,408 cruise visitors, resulting in 550,021 tourists in Bermuda. Although recent growth in 2007 was encouraging, a decline in tourism focused in the fourth quarter led to a substantial overall decline. The WTTC forecasts that total visitation to Bermuda will increase at an A.A.G. of 4.17% between 2009 and 2018, with air arrivals rising at a 5.12%

A.A.G. and cruise passengers growing at a 3.28% A.A.G. Based on preliminary data and interviews it does appear that the decline in tourism continued during the first quarter of 2009.

**Total Visitation to Bermuda** 

Year	Air	Cruise	Total	Year	Air	Cruise	Total
1978	419,784	131,682	551,466	2001	278,103	179,960	458,063
1979	458,781	140,350	599,131	2002	283,969	200,065	484,034
1980	491,640	117,916	609,556	2003	256,579	226,097	482,676
1981	429,801	104,721	534,522	2004	271,617	206,133	477,750
1982	420,288	124,178	544,466	2005	269,587	247,259	516,846
1983	446,864	120,846	567,710	2006	298,973	336,299	635,272
1984	417,461	111,410	528,871	2007	305,548	354,024	659,572
1985	406,687	142,903	549,590	2008	263,613	286,408	550,021
1986	459,711	132,202	591,913	2009	255,660	295,966	551,626
1987	477,877	153,437	631,314	2010	264,045	298,373	562,418
1988	426,850	158,368	585,218	2011	275,755	305,520	581,275
1989	418,352	131,322	549,674	2012	292,163	317,792	609,955
1990	434,909	112,551	547,460	2013	311,409	332,339	643,748
1991	386,178	128,151	514,329	2014	330,036	345,462	675,498
1992	375,231	131,006	506,237	2015	347,332	356,505	703,837
1993	413,134	153,944	567,078	2016	365,288	369,266	734,554
1994	416,990	172,865	589,855	2017	383,289	382,580	765,869
1995	387,556	169,712	557,268	2018	400,875	395,718	796,593
1996	391,450	180,226	571,676	A.A.G. '79-'08	-1.54%	2.62%	-0.01%
1997	380,795	181,885	562,680	A.A.G. '88-'08	-2.38%	3.01%	-0.31%
1998	368,756	188,331	557,087	A.A.G. '98-'08	-3.30%	4.28%	-0.13%
1999	354,085	194,583	548,668	A.A.G. '03-'08	0.54%	4.84%	2.65%
2000	331,984	207,881	539,865	A.A.G. '09-'18	5.12%	3.28%	4.17%

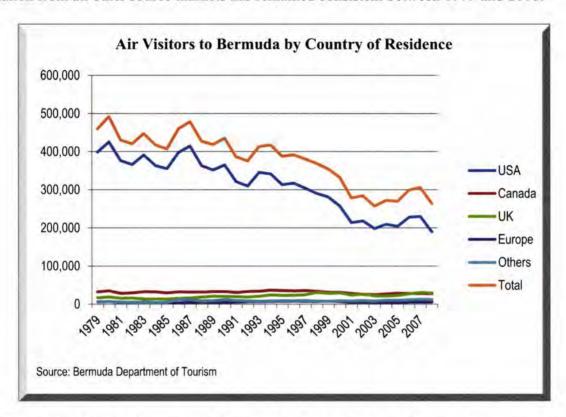
Source: Bermuda Department of Tourism 2007 Economic Impact Report; WTTC

## Air Arrivals

The L.F. Wade International Airport serves the nation of Bermuda and is located at the eastern end of the island, just south of St. George's. The airport has one runway with separate terminals for commercial and private service. A North Atlantic Treaty Organization ("NATO") hangar is also on the property. The commercial terminal includes an arrivals lounge with customs facilities. Visa requirements in Bermuda do not include the United States, Canada, or most countries in Europe, the mains sources of visitors to Bermuda, but do include most nations in Asia. Notable exceptions are India and Hong Kong. Customs facilities for flights bound for the United States are also present, easing the burden for citizens and airlines.

Direct service is currently available from several U.S. cities include New York (JFK, Newark), Boston, Philadelphia, Atlanta, and Miami. In addition, direct service is available from Toronto and Halifax, in Canada, and London's Gatwick Airport. While most of this service is direct, a few routes do have blackout dates.

The following graph displays air visitation to Bermuda by country of origin from 1979 through 2008. As shown, the United States has consistently been Bermuda's top generating market, accounting for approximately 75% of arrivals or greater since 1979. However, the decline in tourism that took hold during the fourth quarter of 2008 impacted the overall year's performance. Visitation from all other source markets has remained consistent between 1979 and 2008.



The following table displays actual figures for air visitation to Bermuda by source market. Between 1979 and 2008, air visitation from the United States decreased at a 2.5% A.A.G. From 2003 through 2008, air arrivals from the United States decreased at a 0.9% A.A.G. to 189,388 overnight tourists. As previously mentioned, this was largely due to a broader decline in U.S. tourism trends experienced during the fourth quarter of 2008. Visitation to Bermuda from other source markets rose between 2003 and 2008, reversing an overall declining trend. Many economists and industry experts expect the U.S. trend, which appears to be spreading due to a global economic contraction, to subside in the next one to two years.

Air Visitors to Bermuda by Country of Residence

				_			
	USA	Canada	UK	Europe	Others	Total	
1979	398,289	32,118	16,568	5,679	6,127	458,781	
1980	425,101	34,643	18,576	6,585	6,735	491,640	
1981	376,062	28,178	15,359	4,778	5,424	429,801	
1982	365,722	29,301	15,771	4,543	4,951	420,288	
1983	390,709	32,402	13,613	5,338	4,802	446,864	
1984	363,173	32,012	13,600	4,488	4,188	417,461	
1985	354,876	29,397	13,125	4,226	5,063	406,687	
1986	397,418	32,059	15,363	3,017	11,854	459,711	
1987	414,256	31,444	16,180	4,307	11,690	477,877	
1988	362,948	31,382	18,481	5,417	8,622	426,850	
1989	351,597	32,710	20,638	4,480	8,927	418,352	
1990	364,822	32,910	20,167	5,022	11,988	434,909	
1991	321,180	30,446	19,487	5,479	9,586	386,178	
1992	309,412	32,867	18,370	6,184	8,398	375,231	
1993	345,352	33,770	20,473	6,230	7,309	413,134	
1994	341,330	36,536	23,998	6,841	8,285	416,990	
1995	313,136	35,478	22,754	7,206	8,982	387,556	
1996	317,217	34,666	23,050	7,592	8,925	391,450	
1997	303,769	35,449	24,405	7,414	9,334	380,371	
1998	289,980	33,629	30,379	6,717	8,051	368,756	
1999	280,321	30,744	28,143	7,462	7,415	354,085	
2000	256,638	30,703	29,211	6,700	8,732	331,984	
2001	213,475	27,793	23,792	4,708	8,335	278,103	
2002	217,868	25,882	25,595	5,063	9,561	283,969	
2003	197,901	24,485	21,665	4,271	8,257	256,579	
2004	209,054	26,491	21,431	4,439	10,202	271,617	
2005	204,005	28,668	22,446	4,233	10,235	269,587	
2006	227,725	27,675	27,008	5,339	11,226	298,973	
2007	229,498	27,844	30,386	5,552	12,268	305,548	
2008	189,388	27,207	29,255	5,748	12,015	263,613	
AAG '79-'08	-2.5%	-0.6%	2.0%	0.0%	2.3%	-1.9%	
AAG '99-'08	-4.3%	-1.3%	0.4%	-2.9%	5.5%	-3.2%	
AAG '03-'08	-0.9%	2.1%	6.2%	6.1%	7.8%	0.5%	

Source: Bermuda Department of Tourism

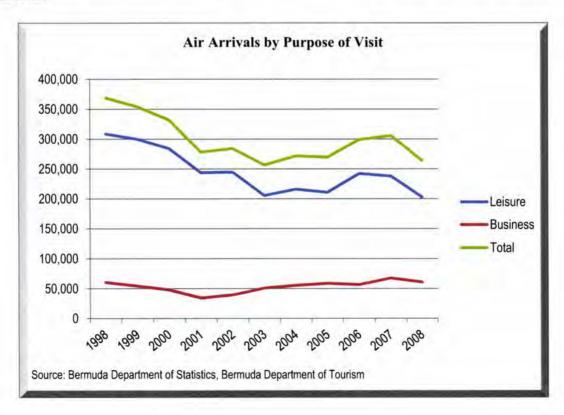
As shown in the following table, the United States has the highest percentage of tourists arriving in Bermuda. The United States was responsible for 75.1% of Bermuda's visitation in 2007 and for 71.8% in 2008, the first year this century that the US accounted for less than 75% of total visitation. Europe accounted for 11.8% of Bermuda's tourists in 2007, which increased to 13.3% in 2008. This pattern was consistent with other source markets, where absolute visitation was relatively stagnant, but due to the decline in tourism from the United States, other source markets accounted for a greater share of total visitation.

Bermuda Historical Tourist Arrivals by County of Residence (%)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008
United States	77.3%	76.8%	76.7%	77.1%	77.0%	75.7%	76.2%	75.1%	71.8%
Canada	9.2%	10.0%	9.1%	9.5%	9.8%	10.6%	9.3%	9.1%	10.3%
United Kingdom	8.8%	8.6%	9.0%	8.4%	7.9%	8.3%	9.0%	9.9%	11.1%
Other Europe	2.0%	1.7%	1.8%	1.7%	1.6%	1.6%	1.8%	1.8%	2.2%
Rest of World	2.6%	3.0%	3.4%	3.2%	3.8%	3.8%	3.8%	4.0%	4.6%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Bermuda Department of Tourism

The following graph and table display Bermuda's air visitation by purpose of visit. As shown, Bermuda is primarily a leisure market. Between 1998 and 2007, leisure visitation has accounted for 78% to 88% of Bermuda's annual visitation. A decline to 77% in 2008 is indicative of the overall decline in tourism being more heavily weighted towards the leisure segment. Between 2002 and 2007, business travel has been accredited with a greater percentage of Bermuda's arrivals. In fact, over that time period, business tourists increased by an 11.40% A.A.G. and leisure visits have decreased by 0.55%. This highlights a trend in tourism dynamics of the island. Tourism to Bermuda has declined over the past 20 years, as have the number of hotel rooms and other accommodations. As international firms with offices in Bermuda and a growing population have made resources scarce, specifically airline capacity, land, and housing, the costs for price-sensitive leisure visitors have risen. Concurrently, the airline and hotel industries have made cost effective alternatives in the Caribbean and tourists have migrated to those other destinations.



Air Arrivals by Purpose of Visit

	Leisure	Business	Total
1998	308,472	60,284	368,756
1999	299,833	54,252	354,085
2000	283,982	48,002	331,984
2001	243,879	34,224	278,103
2002	244,605	39,364	283,969
2003	205,733	50,846	256,579
2004	216,156	55,461	271,617
2005	210,974	58,613	269,587
2006	242,260	56,713	298,973
2007	238,010	67,538	305,548
2008	202,812	60,801	263,613
AAG '98-'08	-4.1%	0.1%	-3.3%
AAG '03-'08	-0.3%	3.6%	0.5%

Source: Bermuda Department of Statistics, Bermuda Department of Tourism

### Cruise Arrivals

Cruises arriving in Bermuda have three potential docking locations. St. George is the longest standing port and is located in the central part of St. George's, a United Nations Educational, Scientific, and Cultural Organization ("UNESCO") member. The historical city is located at the eastern end of the island, north of the airport. Vessels have an easier approach at this port due less reefs, however, a narrow passage limits the port's accessibility for larger boats. The largest boats visiting St. George's accommodate 1,200 to 1,500 passengers.

Hamilton was the solution to the limitations at the St. George's location. The downtown Hamilton location can accommodate up to two vessels including sizes larger than those that can be docked in St. George's. As Bermuda's largest city and political, economic, and cultural hub, the Hamilton docking point has offered these centralized amenities to cruise guests. However, even larger vessels have started using the Dockyard, a former British naval base located on the western end of the island. Two large cruise ships can use this facility and substantial dockside facilities include inter-island transportation, both land and water shuttles, land-based excursions, food and beverage outlets, and retail shopping.

The total number of passengers and crew members that arrived to Bermuda by cruise ship is displayed in the following table. As shown, the total number of cruise passengers has increased by an A.A.G. of 16.96% between 2004 and 2007 to reach 329,750. During the same period of time, the total number of crew members increased by an A.A.G. of 27.56% to 7,637.

#### Bermuda Cruise Arrivals

Year	Total Number of Cruise Passengers	Total Number of Crew Members		
2004	206,122	3,679		
2005	247,259	4,939		
2006	284,440	5,138		
2007	329,750	7,637		
A.A.G. '04-'07	16.96%	27.56%		

Source: Bermuda Department of Tourism 2007 Cruise Arrivals Exit Study

These visitation statistics vary slightly from those reported by the WTTC. Variations could be for any number reasons including passengers or crew not disembarking or the inclusion of private vessels.

Despite the growth in passenger counts, the total number of vessels arriving in Bermuda declined between 2004 and 2007, indicating the arrival of larger vessels and/or vessels with increased passenger loads. In 2007, the most frequented Bermuda port was St. George, with 111 visits, which was followed by Hamilton with 89 and Dockyard with 78. Since 2004, the Dockyard port has experienced the highest rate of growth, at an A.A.G. of 16.76%, accounting for growth in passenger counts as larger ships can be docked at the Dockyard location. Between 2004 and 2007, Hamilton and St. George both experienced declines in visitation as a result of the switch to the larger Dockyard facilities. Docked vessels at Hamilton and St. George decreased at negative A.A.G.s of 7.65% and 4.39%, respectively. Among the three ports, total cruise ship arrivals have declined at an A.A.G. of 1.29% between 2004 and 2007.

Bermuda Port Visits - January to December

	Hamilton	St. George	Dockyard	Total
2004	113	127	49	289
2005	87	111	67	265
2006	79	106	97	282
2007	89	111	78	278
A.A.G. '04-'07	-7.65%	-4.39%	16.76%	-1.29%

Source: Bermuda Department of Tourism 2007 Cruise Arrivals Exit Study

The Bermuda Department of Tourism and its associates have negotiated cruise arrivals on the island for 2009 and 2010. In 2010, which is expected to represent mature performance at least until the Hamilton waterfront is redeveloped, total tourist arrivals are expected to reach 338,715 passengers.

## Visitation Characteristics

The following table displays the average length of stay in Bermuda by quarter. Compared to 2004, in 2007 all four quarters of the year have experienced declines in length of stay. In 2007, the second quarter of the year experienced the shortest average visit at 5.2 nights. The third quarter, July through September, had the longest stay, with 5.6 nights. This was significantly

different from previous years, when the first quarter averaged stays over 6 nights, and 2004, when all quarters averaged over 6 nights.

Average Night Stay in Bermuda							
	Q1	Q2	Q3	Q4			
2004	6.3	6.1	6.3	6.2			
2005	6.8	5.6	5.8	5.6			
2006	6.8	5.5	5.6	5.8			
2007	5.5	5.2	5.6	5.5			

-5.18%

-3.85%

-3.91%

Source: Bermuda Department of Tourism Air Arrivals Exit Study

-4.43%

A.A.G. '04-'07

Over 50% of Bermuda's arrivals are repeat visitors. The following table displays the number of tourists that had returned to Bermuda on the trip in which they were surveyed. Overall the rate of repeat visitation in the mid 50's to low 60's over the previous four years for which statistics are available. The fourth quarter of the year, from October through December, experienced the highest level of repeat visitation in 2007.

Repeat Visitors to Bermuda								
	Q1	Q2	Q3	Q4				
2004	56%	59%	61%	55%				
2005	63%	61%	61%	61%				
2006	61%	57%	61%	60%				
2007	59%	55%	59%	63%				
A.A.G. '04-'07	1.75%	-2.31%	-1.11%	4.63%				

Source: Bermuda Department of Tourism Air Arrivals Exit Study

## Accommodation

The following table displays accommodation capacity between 2002 and 2007. The number of rooms and beds has declined during the timeframe in review, decreasing at A.A.G. of 4.53% and 3.21%, respectively. In 2007, there were 2,743 rooms in Bermuda which offered 5,558 beds.

#### Accommodation Capacity on Bermuda

	Rooms	Beds	
2002	3,459	6,542	
2003	2,073	4,329	
2004	2,944	5,888	
2005	3,062	6,160	
2006	2,993	6,046	
2007	2,743	5,558	
A.A.G. '02-'07	-4.53%	-3.21%	

Source: Bermuda Department of Tourism 2007 Economic Impact Report

## Hotel Inventory

### Existing

Hotel inventory has declined from a peak of 5,044 rooms and 9,677 beds in 1987 to 2,736 rooms and 5,538 beds in 2008. The main reasons for the decline in this integral tourism infrastructure include limited real estate available for development, the high demand and subsequent cost for real estate, and the concurrent expansion of and competition from other tourist destinations. The following select properties are included to provide an overview of the current lodging inventory.

#### Fairmont Southampton

The Fairmont Southampton was built upon Bermuda's highest point in 1972. The property is the sister property to the Fairmont Hamilton Princess, and the two hotels combined offer approximately 25% of the island's hotel inventory. The 100 acre resort includes the Princess Beach Club, indoor and outdoor swimming pools, 11 tennis courts, an 18-hole, par 3 golf course, and a health club and spa.

Seven restaurants are offered on the property including the Newport Room, the only AAA 5-Diamond restaurant in the Caribbean/Atlantic region. Other dining options include an upscale steakhouse, seafood, Italian, and casual restaurants offering breakfast and lunch. Two lounges are also offered on the property, Jasmine, offering specialty martinis and live entertainment, and the Cellar, styled after an old English pub.

The property also offers 15,000 square feet of meeting space that can accommodate groups of 12 to 1,500, one of the largest capacities on the island.



Source: Fairmont Hotels and Resorts

#### Fairmont Hamilton Princess

The Fairmont Hamilton Princess, also known as the Pink Palace, opened on January 1, 1885. The hotel originally offered 70 rooms, but was expanded as part of the deal that brought the Fairmont Southampton to the island, and the Princess now offers 410 guest rooms. Being centrally located in Hamilton, the hotel's amenities include a fitness center, pool, and meeting space that can accommodate up to 300 people. In addition, free ferry service is available to bring guests to the Fairmont Southampton so that they can use the golf course, beach club, and other amenities available there.

The property offers three restaurants that complement one another in price point and fare. Harley's Restaurant, named for founder Harley Trott, serves prime aged beef and has been recognized with the Best of Bermuda Gold Award in hotel dining. The Heritage Court offers more casual fare in an elegant setting adjacent to the hotel lobby. Harley's Terrace features an alfresco menu based on Harley's Restaurant with an outdoor dining experience featuring views of the bay. The Hamilton Princess also offers meeting space that can accommodate up to 300 guests, with the outdoor terrace being able to accommodate up to 500 people.



Source: Fairmont Hotels and Resorts

#### Elbow Beach

Recently named one of the top 500 hotels in the world by Travel + Leisure Magazine, the Elbow Beach Bermuda includes 235 hotel rooms and 5 cottages situated on a 50-acre resort. The resort features a private pink sand beach and offers a number of water sports including scuba diving, deep sea fishing, kayaking, and snorkeling. Other recreational activities include horse riding, tennis, and a fitness center. The resort also features a spa with ocean view suites.

Dining options at Elbow Beach include fine dining at the Seahorse Grill, casual dining including a bistro, a poolside restaurant, and two other restaurants. The 10,000 square foot conference and banquet facilities can accommodate up to 250 guests.



Source: Mandarin Oriental Hotel Group

### Grotto Bay

Grotto Bay offers 201 rooms situated on 21 seaside acres. The resort is proximate to the airport, easing transfers for guests. The resort features a private pink sand beach, fresh water pool, and water sports including sailing, snorkeling, windsurfing, and diving.

Dining options at Grotto Bay include the recently renovated Palm Court which features an island inspired menu in a casual dining atmosphere. The Hibiscus Room is the fine dining option on the property featuring "European cuisine with a Bermudian flavor". The final option, the Bayside Bar & Grill offers active guests quick food and even features a dinner buffet twice

weekly.



Source: Grotto Bay Beach Resort

#### Newstead Belmont Hills

The Newstead Belmont Hills is the first resort to be built in the last 25 years. The resort offers 104 hotel rooms across the harbor from Hamilton, which can be reached via the property's water taxi. The resort offers a fresh water pool, five spa treatment rooms, a 6,100 yard golf course, and meeting space for business guests. Dining options include Beau Rivage, a French restaurant located on the property, and Blu Bar & Grill, located approximately 10 minutes away at the Newstead's golf course. In addition to the hotel rooms, the property is selling 45 units on a 1/6 fractional basis.



Source: Newstead Belmont Hills Hotel

#### Planned

#### Park Hyatt

Park Hyatt St. Georges Resort will be constructed at the site of the former Club Med. The new resort, of which there is a rendering below, will include a hotel, spa, and golf resort adjacent to Tobacco Bay, a popular beach. The 100-room hotel will be built adjacent to Fort St. Catherine, a fortification established by the British in 1612, three years after the island was settled. While the original fort was built from wood, the current structure dates back to the late 19<sup>th</sup> century.

The Park Hyatt will also offer 140 Park Hyatt branded condominiums, some of which will be available as hotel accommodations, and 40 luxury Hyatt Residence Club fractional units. The 12,000 square foot spa, beach club, swimming pools, tennis courts, and Nick Faldo Signature golf course will be available to all people staying on the property. In addition, five restaurants and bars and meeting and function space will also be available to guests.

#### Park Hyatt Rendering



Source: Bazarian International Financial Associates, LLC





Source: Bermuda Department of Tourism

#### Tucker's Point

Opening April 17, 2009, Tucker's Point Hotel and Spa is located near the Mid Ocean Club in one of Bermuda's most prestigious neighborhoods. Like the Park Hyatt and recently opened Newstead Belmont Hills, Tucker's Point will include residential opportunities. The 88-room hotel will include 19 hotel suites of the highest quality, some of which will feature views of Castle Harbor. Dining options will include a fine-dining option, an outdoor terrace, a grill, and dining at the pool, beach club, and golf course. Recreational activities include two pools, a beach club, an 18-hole golf course, and sailing, deep sea fishing, and scuba diving. A 12,000 square foot spa will offer European-style treatments, yoga and Tai Chi, and a fitness center. Finally, 5,000 square feet of meeting space is available to guests.



Source: Tucker's Point Hotel and Spa

Residences at Tucker's Point include an array of options including the Ship's Hill Estate Homes and Town Homes, waterfront homes at Shell Point, Harbour Drive Villas, and a fractional Residence Club. The Estate Homes and Town Homes on Ship's Hill are set around the 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup> holes of the golf courses and are sold out. The Harbour Drive Villas will be located at

the edge of Castle Harbour and feature fantastic views. Shell Point, which is sold out, features one and two story homes located along the edge of the harbor. Finally, the Residence Club offers 2, 3, and 4 bedroom units in two locations, along Harbour Drive or on Ship's Hill adjacent to the golf course.

The overall quality and distinction associated with Tucker's Point is among the highest on the island. Residences have sold for approximately \$5 million and a standard room night is expected to command \$800 to \$900.

#### Other Proposed Hotel Developments

Four other proposed and notable developments are at earlier stages than the aforementioned properties.

- A potential Hilton property could be constructed at the current site of The Villas, a
  property currently owned by the Douglas family.
- Four Seasons is redeveloping a site at Elbow Beach known as Horizons.
- Jumeirah proposed a hotel for a site that was formerly a US Naval station.
- Ritz Carlton is considering a downtown Hamilton hotel development.

## Tourist Expenditures

The following table displays the average on-island tourist expenditures for air and cruise arrivals. As shown, expenditure from air visitors increased significantly in 2007, as compared to 2006, and has grown at an A.A.G. of 6.13% since 2001. In 2007, the total expenditures by air visitors were \$443.9 million. Expenditures by cruise passengers have increased at an A.A.G. of 5.42% from 2001 through 2007 to a total of \$54.5 million. Total expenditures by air visitors account for 90% of all on-island expenditures by tourists despite air visitors representing less than half of all the visitors to the island.

Tourist Expenditures in Bermuda

(\$PATHION)			
	Air Visitors	Cruise Passengers	Total
2001	\$310.7	\$39.7	\$350.5
2002	\$333.5	\$45.3	\$378.8
2003	\$306.8	\$56.1	\$362.9
2004	\$343.2	\$50.3	\$393.5
2005	\$340.6	\$50.5	\$391.1
2006	\$389.2	\$59.5	\$448.7
2007	\$443.9	\$54.5	\$498.4
A.A.G. '01-'07	6.13%	5.42%	6.04%

Source: Bermuda Department of Tourism 2007 Economic Impact

The total recreational and leisure activities expenditure figures for visitors arriving by air and cruise ship are displayed in the following table. As shown, recreational and leisure activity expenditures by air arrivals have increased by an A.A.G. of 18.38% between 2005 and 2007 to reach \$19.2 million. However, they are still relatively small compared to total expenditures in

the range of \$340 to \$440 million over that time frame. Cruise passenger expenditures increased at an A.A.G. of 5.33%, from \$6.4 million to \$7.1 million, over that same timeframe. As shown, the average on-island expenditure for recreational and leisure activities by cruise passengers declined from \$26 in 2005 to \$20 in 2007, representing a negative 12.29% A.A.G. In 2007, 36.7% of cruise passenger expenditures were spent on recreational and leisure activities. In 2004, the average amount spent by cruise passenger on recreational and leisure activities was 61.6% of their total on-island expenditures.

Recreational and Leisure Activities Expenditure

	(\$WINION)				
	Total Air Expenditures (million)	Total Cruise Expenditures (million)	Cruise Passenger On- Island Average		
2003	-	-	\$25		
2004	14		\$31		
2005	\$13.7	\$6.4	\$26		
2006	\$16.8	\$5.4	\$16		
2007	\$19.2	\$7.1	\$20		
A.A.G. '05-'07	18.38%	5.33%	-12.29%		

Source: Bermuda Department of Tourism 2007 Economic Impact Report

### Seasonal Visitation

The following table displays Bermuda's average high and low temperatures and the average precipitation. Throughout the year, the average high in Bermuda is 76.1°F and the average low is 68.2°F. August has the highest average temperature and the period from June through October experiences average highs of 89°F or higher. February is the coldest month, with the lowest average high temperature of 68°F. The average monthly precipitation is 4.6 inches. The month of October receives the most rain on average, with 6.6 inches.

June 2007 received the highest monthly arrivals for the year, while average temperatures are high but not at their peak. July and August, which are the warmest months, when school is in recess and many U.S. families take vacations, received the second and third most arrivals in 2007. However, tourist arrivals in May were ranked fourth. May's average high temperature was 75°F, which is tied for the sixth warmest month, but May receives the least amount of rain. The increased visitation during summer months indicates tourists' desire for warmer weather. This dynamic is unique among Caribbean destinations for mainland North Americans. Whereas most Caribbean destinations feature the most favorable weather conditions precisely when northern parts of the continent are coldest, Bermuda's proximity leads to weather patterns that are consistent, albeit warmer, than those in several of its major feeder markets.

Bermuda's Climate and Tourist Arrivals by Month

	Average High (°F)	Average Low (°F)	Average Precipitation	2007	% of Year
January	69	61	4.9	10,725	3.50%
February	68	60	4.4	13,192	4.30%
March	69	60	4.3	21,908	7.20%
April	71	63	3.5	26,787	8.80%
May	75	68	3.1	34,471	11.30%
June	81	73	5.1	38,336	12.50%
July	85	77	4.6	37,473	12.30%
August	86	78	5.1	37,441	12.30%
September	84	76	5	22,961	7.50%
October	80	72	6.6	26,582	8.70%
November	75	67	4.1	20,762	6.80%
December	70	63	4.5	14,910	4.90%
Average/ Total	76	68	4.6	305,548	100.00%

Source: Caribbean Tourism Organization, The Weather Channel

## POTENTIAL DEVELOPMENT SITES

Although any decisions on gaming in Bermuda have not been made, legislation yet to be developed, and guidelines for locations have yet to be established, it is apparent based on discussions with Bermudian officials and citizens, as well as feedback as gathered through the mail, online, and through forums, that if casinos were established in Bermuda, it likely that the quality and quantity of facilities would have to conform to the overall positioning of the island country. Hence, it is likely that recommendations would include fewer facilities, perhaps centralized and that from a quality perspective offer the type of facility that existing and expected tourists would prefer. Centralized operations in destination markets are typically established in hotels, although a number of other locations are possible. The following sites were reviewed in the event that a larger facility was purpose-built as a casino or casino hotel. These potential locations, in addition to the hotel facilities located on the island, were considered as potential casino locations.

## Gun Powder Tavern, St. George's

Located near the Park Hyatt site, the Gun Powder Tavern is located within a former British ammunitions bunker. The square footage of the bunker is not clear, although it is assumed to be somewhat large given its intended purpose. Of greater concern is the historical significance of the site and the fact that only one entrance/exit currently exists. The volume of people that can be attracted to a casino property alone could create a bottle neck at this location. Moreover, the need for supplies, employees, and armored car service (for currency deposits) to all use this same entrance would cause most operators to consider alternatives.

### Former NATO Base

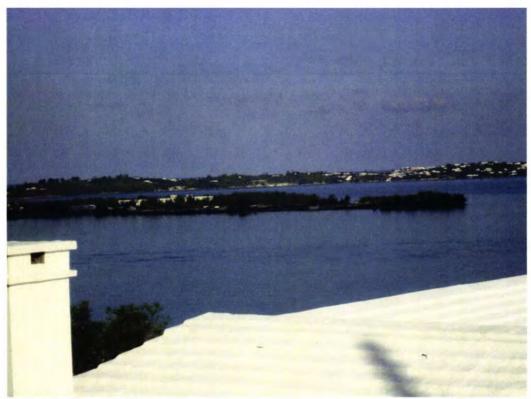
NATO has a former air base located adjacent to the airport on the eastern end of the island. The property includes waterfront property and enjoys great access from the airport and St. George's with greater travel times required from Hamilton, Paget, and other points to the west. The overall base offers an extensive amount of real estate including the former Officer's Club pictured below. Some of the property is being developed as low cost housing and a hospital.



Source: The Innovation Group

## Morgan's Point

Morgan's Point formerly housed a United States Navy facility, but is now available for redevelopment. George's Bay Road offers the only access to the property along a narrow isthmus that broadens to the site available for development. The property, which was considered for development by Jumeirah, may require some clean-up prior to development. The site is located along the border of Sandys Parish and Southampton Parish, on the western end of the island.



Source: The Innovation Group

## **Dockyard**

The Dockyard is located at the end of the island and is a former British Navy base. The area now has been redeveloped as a port for cruise liners, as the facility is ideal for larger vessels. Some of the buildings have been redeveloped and now offer bicycle and scooter rentals, shopping, and dining. The land itself is largely developed but several structures still exist and maybe usable for casino gaming purposes. Access to the site via roadway is limited as it is located at the far end of the island, but is enhanced by water taxi service from St. George's, Hamilton, and a few points closer.



Source: West End Development Corporation



Source: The Innovation Group



Source: The Innovation Group



Source: The Innovation Group



Source: The Innovation Group

# "John Swan" Building

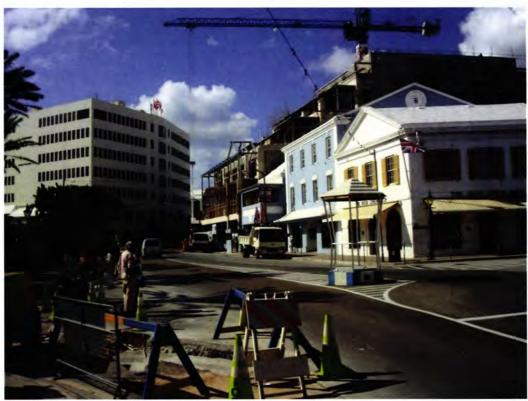
The "John Swan" building, pictured below, is being constructed in Hamilton. The building, which is currently under construction, is located between Front Street and Reid Street, a main throughway for traffic entering the city. The planned use and layout of the structure is not clear and may not be suitable for gaming purposes. The central location could benefit the property, although traffic and parking could be considerable concerns.



Source: The Innovation Group

# Bank of Bermuda Building

The Bank of Bermuda building is located on Albuoy Point, in the heart of Hamilton and near the passenger ferry facilities. The building is now owned by HSBC and significant parts of the space are available. Retrofitting such a facility can be challenging and successful conversions have not historically included large scale casino developments. Like the John Swan building, a casino at this facility would be hampered by limited access and parking.



Source: The Innovation Group

### Darrell Island

Darrell Island is located in the harbor between Hamilton and Southampton. The island formerly served as a seaplane port and is currently being used for public recreation and is home to a drug treatment center. No bridge or roadway currently exists to reach the island, and although the water taxi system offers a number of stops, the additional step in terms of transit will likely deter some visitors that otherwise would have come to a casino facility at that location.

## Pembroke Marsh/Dump Site

The Pembroke Marsh area has been used as a dump over the past several decades. The area could possibly be used for redevelopment and is located immediately north of downtown Hamilton. Access to the site could be better, relative to sites in downtown Hamilton, which have the advantage of being closer to hotels, shopping, and other areas that tourists frequent.



Source: The Innovation Group

# Sports Arena

The Sports Arena hosts the annual World Rugby Classic and is located northeast of Hamilton. Some land around or between the fields could potentially be available for development. Infrastructure for the area appears to be superior when compared to other sites in terms of traffic ingress and egress as well as parking.



Source: The Innovation Group



Source: The Innovation Group

### Hamilton Waterfront

Plans to redevelop the Hamilton waterfront area are established and some preparation of the site has already started. The current plan includes the cruise terminal area, stretching from the water taxi dock to the former cruise terminal. Beyond that point, a container port vital to the island's imports could be included in a long-term plan, but at this point the redevelopment of the container port has not been vetted.

The first Phase of the redevelopment effort includes reclaimed land that will extend the current dock area into the harbor and create docking for up to two cruise ships as well as a transportation hub, retail, and a central, revenue-generating attraction that could become a casino, convention center, concert pavilion, or other purpose-built facility.

# THE IMPACT OF GAMING ON TOURISM

The following jurisdictional experiences consider the installation of gaming specifically as it relates to international tourism. In order to observe the impact of expanded gaming on international visitation in these markets, we reviewed visitation statistics maintained by the World Travel and Tourism Commission (WTTC) as they corresponded to the introduction of new or expanded gaming product in a given ''jurisdiction. Specifically, we compared the regional market share and average annual growth of international tourist visitation over the following periods:

- In the years up to the benefit of new or expanded casino gaming;
- In the year of the introduction of new or expanded casino gaming; and
- · Over the years immediately following the introduction.
  - Comparisons could not be made more than two or three years following the introduction because of the noise presented by additional market factors which could not be isolated

This empirical evidence of positive impact on international tourism visitation as a result of new or expanded casino gaming was completed for the following markets:

- The Bahamas
- Puerto Rico
- Macau

Regional anecdotal evidence as to the continuing trend of casino gaming as an important component of competitive standing in the regional tourism marketplace is discussed through the recent experiences of Jamaica.

General information regarding recently successful bid processes intended to drive tourism development in Singapore and Uruguay are also presented.

## Caribbean

#### Bahamas

Built in 1969, the property now known as the Atlantis had its ups and downs as it went through several owners and names -- the most recent of them being Merv Griffin's Paradise Island Resort & Casino. In 1993 Sun International Bahamas Ltd., a consortium controlled by South African multi-millionaire investor Sol Kerzner, endeavored to spend \$450 million to more than double the size of its existing 1,138-room Atlantis Paradise Island resort to over 2,300 rooms and expand its casino to 50,000-square-feet, which at the time was the largest in the world outside Las Vegas. In December 1994, Sun International bought the hotel and over the next four years has modernized and expanded most of its facilities. The first full operating year for the Atlantis Mega Resort-Casino was 1999.

In our analysis of WTTC statistics corresponding to the 1999 completion of the Atlantis Mega-Resort and its expanded gaming product we found evidence of the casino industry's impact on international tourism growth. In 1990 the Bahamas accounted for 16% of all visitation to the Caribbean region. Over the 8 years that followed the Caribbean region saw strong growth in international visitation, averaging 4% as visitation to the Bahamas grew at just 0.7% per annum over the same period. In 1999, first full year of expanded resort and gaming operations at the Atlantis, the Bahamas witnessed 9% growth in international visitation as the rest of the region stagnated. Growth in Bahamas international visitation surpassed that in the Caribbean by 36% over each of the next two years, resulting in 12% aggregate growth to regional market share as compared to the pre-Atlantis statistics and a 24.9% growth to actual international tourist levels on the same basis.

Impact on International Visitation to the Bahamas

	1990	1998	1999	2000	2001	AAG 1990 - 1998 Before Major Atlantis Expansion	1999 First Full Year with Expanded Atlantis	-2001 Impact – Expanded Atlantis Gaming Resort
Caribbean Region - Total Intl Visitors	19,730	27,311	27,349	30,395	30,274	4.1%	0.1%	5.2%
Bahamas - Total Intl Visitors	3,166	3,348	3,648	4,204	4,183	0.7%	9.0%	7.1%
Bahamas Market Share of Caribbean	16.0%	12.3%	13.3%	13.8%	13.8%			

Source: World Travel and Tourism Commission Satellite Accounting Tool

In recognition of the level of investment by the Kerzner's group, the government offered a new casino license agreement that, as of Jan. 1, 1998, resulted in a reduction in the effective casino tax rate and a two-decade monopoly for the property as a mega-resort casino development in the Bahamas. The license agreement also included an

arrangement with the Bahamian Government pursuant to which the Bahamian Government would match the company's contribution, up to \$4.0 million annually, toward the direct costs related to staging certain marketing events, public relations activities and the production and placement of advertisements in all media to promote the destination and the company's Paradise Island properties.

The agreement was restated in 2003 in anticipation of the Atlantis Phase III Expansion. The restated agreement provided a series of credits that amended the tax structure in favor of the operator and effectively eliminated licensing fees. The joint marketing agreement was also extended.

After completion of the Phase III expansion in 2008, the facility had over 90 table games and over 1,000 slot machines. The primary hotel featured approximately 2,310 rooms, though an additional 1,700 rooms existed on the property including two separate upscale resorts-within-a-resort now offering nearly 1,100 rooms which cater to the luxury segment. Atlantis features 21 restaurants and 19 bars and lounges 300,000 square feet of meeting space, a 14-acre dolphin habitat, and a new 141-acre water park called Aquaventure.

The gaming environment created by the government has piqued the interest of further investment. Baha Mar was slated to be a \$2.7 billion joint venture between Baha Mar Resorts and a subsidiary of Harrah's Entertainment, Inc., with management and related agreements in place with Starwood Hotels & Resorts Worldwide, Inc. The original development was to feature the Caribbean's first Caesar's Resort Hotel & Casino, as well as four hotels all under Starwood flags – altogether totaling approximately 3,000 rooms at the Cable Beach site under the following brands:

- 1,000 room Caesars Palace Hotel at Baha Mar
- "W" Baha Mar (100 Residences)
- 200-Room St. Regis Baha Mar
- 700-Room Westin Baha Mar
- Sheraton Cable Beach Resort (opened in 2007, \$80 million conversion, formerly an all inclusive Cable Beach Radisson)
- Wyndham Nassau Resort and Crystal Palace Casino (hotel refurbished in 2007, management contracted to Wyndham Resorts, 2008)

While this particular deal as described above ultimately fell through for reasons specific to the companies involved, this jurisdiction continues to attract the interest of well established developers and gaming operators.

#### Puerto Rico

The Puerto Rico Games of Chance Act of 1948 legalized certain forms of casino gambling in licensed places in order to promote the development of tourism. For years Puerto Rico enjoyed the advantage of being one of the few locations in the region that had gambling and enjoyed access to the U.S. and South American markets. For gamblers and tourists alike, Puerto Rico was an alternative destination to Nevada and Atlantic City, but by the mid-90's the performance of the operations had deteriorated due to competitive pressures generated by the international proliferation of gaming.

No modifications to gaming regulation were made until the 1997 reforms gave the Puerto Rico Tourism Company the authority to promulgate operational regulations. Previously regulatory changes were a legislative matter, now only policy changes needed to be addressed through the judiciary.

Perhaps the most relevant result was the change in revenue distribution between the state and the operator, effectively a reduction in the operating tax rate. Operators presently keep 40% of all slots revenues. Prior to the change, operators were running under 10/90 revenue split in favor of the government, which precluded any significant development of slots at the facilities. The more operator-friendly 40/60 split, caused a change in the operator's views on slot machines, and since the change went into effect, operators have more freely invested capital into slots. Subsequent returns have enabled operators to keep facilities attractive in the international context. Thus although lacking a gaming resort of the caliber of Atlantis, Puerto Rico itself was able to maintain standing as a gaming destination given a variety of factors which included the increased quality of the gaming offering.

Puerto Rico currently offers 17 hotel-based casinos. On average the casinos are relatively small, with a total of 324 tables and 4,666 slots for the island. Gaming win in Puerto Rico is estimated at approximately \$350 million for FY 2005, the most recent year for which official slot performance statistics are available, with slots representing approximately 82% of the market. The table below offers a profile of the hotel-based gaming industry in Puerto Rico, based on number of gaming positions.

**Puerto Rico Casino Properties** 

	Location	Tables	Slots	Positions
Ambassador Plaza	Condado	12	482	566
Wyndham Condado Plaza	Condado	14	378	476
Marriott Courtyard Isle Verde	Isle Verde	12	403	487
Diamond Palace	Condado	6	207	249
Wyndham El Conquistador	Fajardo	12	223	307
Wyndham El San Juan Hotel & Casino	Isle Verde	16	390	502

San Juan Market Ex-Market	5 190 68	180 4,500 1,143	215 5,830 1,619
		100 C	
San Juan	5	180	215
Caguas	18	440	566
Old San Juan	8	296	352
Condado	26	451	633
Isle Verde	20	363	503
Rio Grande	10	110	180
Isle Verde	19	302	435
Isle Verde	12	275	359
	Isle Verde Isle Verde Rio Grande Isle Verde Condado Old San Juan	Isle Verde       19         Rio Grande       10         Isle Verde       20         Condado       26         Old San Juan       8	Isle Verde     19     302       Rio Grande     10     110       Isle Verde     20     363       Condado     26     451       Old San Juan     8     296

Source: Puerto Rico Tourism Company, Gaming Division, Casino City Gaming Almanac; The Innovation Group

In our analysis of WTTC statistics corresponding to the 1997 legislative changes and subsequent expansion of gaming on the island of Puerto Rico we found possible evidence of the casino industry's impact on international tourism growth. In 1990, Puerto Rico accounted for 16.9% of all visitation to the Caribbean region. Over the 8 years that followed the Caribbean region saw strong growth in international visitation, averaging 4% as visitation to Puerto Rico grew at 3.5% per annum over the same period. In 1998, first full year of expanded resort and gaming operations on the island, Puerto Rico witnessed 7.4% growth in international visitation as the rest of the region grew at less than half that rate (3.2%).

Hurricane Georges destroyed or damaged nearly 4,500 of the 11,900 hotel rooms endorsed by the Tourism Co. as of October 1998. Of these, 75% were restored in time for the high season, which begins Dec. 15 and ends April 15, but still 1,400 rooms remained out of commission, negatively impact international visitation in 1999. Negative growth in this year could potentially also be attributed to the opening of Atlantis on the Bahamas. As the hotel-based gaming product collectively continued to expand and improve through 2001 (and more hotel rooms came back online), growth in the Puerto Rico international visitation surpassed that in the Caribbean by 50% over each of the two years following the legislation change.

Overall, in 2001 Puerto Rico's share of the regional market was down 5.2% while actual international arrivals were up 5.1% compared to the change in gaming legislation. According to records maintained by the Puerto Rican Tourism Authority, over the same period annual slot win increased \$64.8 million, a 53% increase over annual performance prior to the new legislation. Although table performance is not reported by the Puerto Rico Tourism Authority, the increased traffic brought about by the larger and more attractive facilities likely boosted table play. Thus, based on the growth in the performance of the island's gaming product over the period under review, it is plausible to assume that the enhanced gaming product at least partially mitigated the negative effects of the outside factors discussed above.

Impact	on	Internatio	nal Viei	itation	to D	norto	Dica
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1990	1997	1998	1999	2000	2001	1990- 1997 Before Reduced Taxation	1998 Introduction of Reduced Taxation and	1999- 2001 Impacts of Expanded
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								Expanded Gaming	Gaming
Caribbean Region - Total Intl Visitors	19,730	26,459	27,311	27,349	30,395	30,274	4.3%	3.2%	5.2%
Puerto Rico Total Intl Visitors	3,342	4,350	4,671	4,221	4,566	4,908	3.5%	7.4%	7.8%
Puerto Rico Market Share of Caribbean	16.9%	16.4%	17.1%	15.4%	15.0%	16.2%			

Source: World Travel and Tourism Commission Satellite Accounting Tool

#### Jamaica

Currently, Jamaica does not have any full-scale casinos. There are, however, a number of small slots-only facilities located in major cities and on tourist resorts. The small facilities located on resorts are typically designated for guest-only play. In 2007, the Jamaican gaming environment consisted of approximately 1,200 operators with less than 20 machines, and around 14 gaming lounges that were licensed to have between 20 and 150 VLTs.

Similar to Bermuda, the government is presently managing the proposed reconfiguration of gaming laws to accept full casino gaming as a means to enable the attraction of large-scale gaming resorts that would have the potential to enhance the country's competitiveness in the tourism arena. Jamaica's Betting, Gaming and Lottery Commission ("BGLC") noted in its submission to parliament for the fiscal year that ended on March 31, 2008 that the expected arrival of mega gaming lounges would provide continued growth in the gaming sub-sector.

The proposed licensing scheme which was outlined on Jan 13th, 2009 will be restricted to largescale resort developments, with over 1,000 rooms and capital investment of at least J\$1.5 billion. Two planned multi-billion dollar developments have been given provisional approval for casino licensing -Celebration Jamaica's 1,000-room Palmyra Resort in Montego Bay and the Tavistock Group's 8,000 room Harmony Cove Resort in Trelawny. The government has estimated that the casinos have the capacity to provide over 20,000 jobs and generate J\$30 billion in government revenue a year. While some regional casino developments, most notably the Bahamas, have restricted access to the casino resorts to foreign visitors, the Jamaican prime minister, Bruce Golding, has announced that locals will be entitled to play at the new venues. This has caused concerns among church and community interest groups in Jamaica that the new facilities will cause social and economic problems for local people. In attempts to alleviate these concerns the government has promised that taxes from these casinos would go towards supporting education, health and national security development. It has also promised that casino development will remain limited, with Tourism Minister Edmund Bartlett promising in mid-2008: 'You will not see a casino dotting the landscape across Jamaica...casinos will be no more than 15 to 20 percent of the total value of the investment overall.'

## Asia

Though the Southeast Asian gaming market is of an entirely different magnitude than that of the Caribbean (the former generally expected to be approaching \$25-30 billion in gaming revenues by 2011), the competitive dynamic evolving in that region is comparable to that of the Caribbean. Jurisdictions across Asia (including Japan, Taiwan, and The Philippines just to name a few) have been considering the potential of licensing casinos in order to remain internationally

competitive with regional jurisdictions that already have or our planning to develop substantial gaming product within their borders.

This dynamic was triggered by the transformation of Macau into the largest gaming market in the world in the few short years since the 2004 inception of mega gaming products in that market. The idea of possibly liberalizing casino gaming laws gained wider acceptance in the region following the very successful bid process in Singapore which has lead to over USD\$7 billion in capital investment in two major integrated gaming-resort projects. At present, there is a fear of becoming less competitive as an international destination in the Southeast Asia market, and to potentially miss out on the ability to draw international tourist flows as mega-destination gaming projects continue to multiply through the region.

The following section will examine the impact of gaming development on international tourism in Macau. Additionally, Singapore's recent bid process will also be discussed.

#### Macau

Gaming was legalized in Macau in 1962 under a government-issued monopoly license to Stanley Ho's Sociedade de Turismo e Diversões de Macau ("STDM"). In 2002, the Macau government ended the monopoly system and six casino operating concessions and sub concessions were granted to STDM, Wynn Resorts, Las Vegas Sands, Galaxy Entertainment Group, the partnership of MGM Mirage and Pansy Ho (daughter of Stanley Ho), and the partnership of Melco and PBL. Today, there are 16 casinos operated by the STDM, but it was the 2004 opening of the Sands Macau (Las Vegas Sands) followed by the Wynn Macau (Wynn Resorts) in 2006 that ushered in the new era for Macau, making Macau the highest-volume gambling center in the world. In 2007, Venetian Macau, at the time the second (now third) largest building in the world, opened its doors to the public, followed by MGM Grand Macau. Gaming revenues equaled \$13.7 billion in 2008.

In our analysis of WTTC statistics corresponding to the 2004 expansion of gaming on the island of Macau, it is clear that gaming substantially altered the level of international tourism to the island. In 1990, Macau accounted for 20.8% of all international visitation to the Southeast Asia region. Over the 17 years that followed international visitation to Macau and the greater Southeast Asia region grew at a similar pace per annum (7.9% in the region to Macau's 7.5%).

In 2004, the first full year of expanded resort and gaming operations on the island, Macau witnessed 20.4% growth in international visitation as the rest of the region grew at 7.9%. Annual growth in international visitation to Macau more than doubled that in the greater Southeast Asia market on average for each of the next three years, resulting in 65.7% aggregate growth to regional market share as compared to the statistics from before the initiation of expanded gaming operations in the market. Actual international tourist arrivals grew 134% on the same basis.

Imp	act on	Interna	tional	Visitati	on to M	acau			
1990	2002	2003	2004	2005	2006	2007	1990- 2002 Before	2004* Introduction of	2004- 2007 Impact of

								Expanded Gaming	Expanded Gaming	Expanded Gaming
Southeast Asia Region - Total Intl Visitors	22,334	52,963	45,312	60,056	61,647	66,773	74,854	7.5%	7.9%	7.6%
Macau - Total Intl Visitors	4,636	11,531	11,888	16,673	18,711	21,998	27,003	7.9%	20.2%	17.4%
Macau Market Share of SE Asia	20.8%	21.8%	26.2%	27.8%	30.4%	32.9%	36.1%			

<sup>\*</sup> Regional tourism was affected in 2003 by the SARS outbreak, dropping 14.4% in that year. Calculations for the 2004 introduction of gaming are made on a pre-SARS basis (2002) in order to ignore the temporary impact the scare had on regional tourism.

Source: World Travel and Tourism Commission Satellite Accounting Tool

It is important to note that some growth in the Macau market over this time corresponded with an easing of travel visas for mainland Chinese residents to visit the nearby gaming enclave.

### Singapore

Singapore legalized casino gaming in 2005 and said it would allow two casino resorts to be built. Genting was awarded rights to build and operate the Sentosa casino (which it will spend US\$4 billion to build), the second to be approved by Singapore following its selection of Las Vegas Sands for the US\$3.6bn Marina Bay Sands resort in central Singapore. Both resorts are anticipated to be fully operational during 2010 (though Sands will partially open in 2009). Collectively the two operations are expected to generate revenues in the range of US\$2.5-\$3 billion per year upon stabilization, largely from international tourists at whom the resorts are targeted.

The government collected over \$1 billion in upfront fees for 2 individual 30-year operating concessions. At least 5 investment groups, most of which included the largest and most established names in global gaming industry, were vying not only to pay the concession fees but pledging similar development projects in order to win the opportunity to compete in the market.

Singapore's RFP outlined a small number of technical requirements relating to the possible sites, but presented only the following in terms of an investment guideline for one of the opportunities:

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

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

## Latin America

### Uruguay

Uruguay presently has 15 casinos and 26 gaming rooms (which house an estimated 5,600 slots), of which only two are privately owned and operated. The \$206 million Conrad Resort and Casino in Punta del Este (a major beach destination for neighboring Brazil and Argentina) has been largely profitable since it opened in 1997.

The government effectively decided to privatize Montevideo's historic Hotel-Casino Carrasco by opening a tender to award a 30-year management contract for the casino to a private company. Under the terms of the tender, the winning bidder will agree to restore the Carrasco's once prestigious casino-hotel to operate as a premier tourist attraction for the city.

The municipal council of Montevideo began evaluating offers in May in collaboration with the National Corporation for Development. A points system is being employed to determine the winner, with five points awarded for projected employment and salaries, five for plans to attract international tourists and wealthier patrons, and 10 points for expertise in hotel and casino management.

Spanish gaming group, Codere, and Sofitel (an Accor hotel brand) found themselves ahead of three substantial rival bidders – including the Hyatt Group and a consortium including Delaware-based Century Casinos –in September 2008. In January, 2009 the Codere and Sofitel joint-venture (which would amount to capital investment of over \$60 million in the historic landmark hotel-casino) was awarded preferred operator status of the historic Montevideo property.

As part of the bid, Codere and Sofitel pledged annual revenues for local government of at least 44m Uruguayan pesos (US\$1.8m) for the first three years of the contract and 88m pesos (US\$3.6m) annually thereafter. This was pledged on top of the government proposed tax rate of 18 percent on gross gaming revenues.

# CASINO GAMING MARKET ASSESSMENT

# Economic Assumptions

The following revenue projections are based, in part, on the following assumptions:

- The proposed hotel rooms will come online by 2011;
- In each of the scenarios presented, operators and Bermuda Department of Tourism both undertake significant marketing efforts both on the island and in the key source markets for visitation;
- Hotel operators will employ professional marketing programs, including advertising and promotion, instituted prior to opening, and maintained throughout the period of analysis;
- A significant effort to drive mid-week casino patronage is successful;
- The U.S economy will stabilize and begin recovery in 2010
- No significant economic or visitation fluctuations will occur during the period of analysis;
- It is expected to take some time for induced visitation to ramp-up to its full potential.
   Several markets have historically taken some time to ramp-up, and with the growing familiarity of gaming in source markets, it is estimated that substantial marketing efforts will enable Bermuda to reach its full induced potential over three years;
- Casino gaming will only be permitted in the assumed, authorized, land-based facilities contemplated in this report;
- Regulations overseeing casino operations will not limit hours, wagers, or credit conditions; and
- · Slot machines and table games will be permitted.

# Gaming Revenue Projections

A gravity model was developed in order to project potential gaming revenues for casino gaming in Bermuda. This model is used to project gaming revenue for the market taking into account current estimated gaming factors that have been derived from primary research on gamers in the local market and tourists from the United States as well as comparisons to other markets for which we have data available.

A gravity model is typically employed to calibrate the market behavior of residents living within reasonable driving distance of a proposed development. The model is sensitive to the accessibility of a proposed development from each postal code within Bermuda, and the subsequent distribution of gaming visits within the market is thus based on empirical evidence that has been observed in other gaming markets.

In the case of leisure tourists, where many are repeat visitors with an average stay approaching a week and limited evening entertainment alternatives, the gravity model methodology was used. Hotel supply was integrated into the model based on its location, with visitors distributed throughout the properties based on the share of room supply. Although occupancy levels were not taken into consideration, as individual occupancy levels were not available, discussions with hotel managers and other industry experts indicated that variation from national averages is

limited. People visiting the island but staying with friends or family were assigned, pro-rata, to a geographic market based on the share of housing supply.

### Gravity Model Methodology

Gravity models are commonly used in location studies for commercial developments, public facilities, and residential developments. The general form of the equation is that attraction is directly related to a measure of availability such as gaming positions and inversely related to the square of the travel distance. Thus the gravity model quantifies the effect of distance on the behavior of a potential patron and considers the impact of competing venues.

The gravity model used for Bermuda included the identification of 9 distinct market areas. Using our GIS software and the Government of Bermuda Planning Department's database, the adult population, latitude and longitude, and average household income is collected for each postal code.

Each of these market areas is assigned a unique set of propensity and frequency factors. (These factors are defined in the following pages). Surveys and analysis of player databases from operating casinos and studies of gaming behavior in numerous gaming jurisdictions have shown that both propensity and frequency are inversely related to travel time to a casino. In other words, as travel times increase, both the percentage of persons who gamble and the number of times they visit a casino tends to decrease. Gaming behavior also varies based on the availability and quality of the gaming experience. Alternative forms of entertainment are also a factor in determining gaming behavior. For this analysis, propensity and frequency rates for each market area are based on current gaming behavior (wagering on sports, Crown and Anchor) and the results of surveys that have been provided by the Bermuda Department of Tourism.

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

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

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

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

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

- Gamer Visits. This measure is used to specify the number of patron trips to a
  gaming market, where an individual can make any number of separate visits in the
  course of a year. In order to estimate the gamer visits, market penetration rates, made
  up of the separate measures of propensity and frequency, are applied to the adult
  population in each postal code.
- Propensity. Propensity measures the proportion of the adult population within a market that is likely to participate in gaming. Generally this factor decreases with distance from the market center. For full service casinos this can be as high as 60% in fully developed casino markets such as the Mississippi Gulf Coast, or in markets where competitive entertainment and food and beverage options are extremely limited. This measure is type dependent in that it refers to the propensity of individuals who are likely to participate in that form of gaming.
- Frequency. This measures the average number of visits that an adult with a propensity to gamble will make annually to a gaming venue in the subject market. Frequency is a function of annual gaming budget as indicated by income variations, the number of venues in the market, and the quality and type of gaming facility. The frequency of visitation is inversely related to distance from a gaming venue, as fewer trips are made as convenience declines. However, the length of the average gaming trip increases with distance, such that an annual gaming budget for those living relatively far from a gaming venue may approach that of those living close by, for whom short gaming trips are typical.
- Win per Visit. This variable is the average win per visit for all gaming visits within a market or market segment. This tends to increase with distance as the individual gamer makes fewer trips per year and is likely to maximize his or her participation for the trips that are made. It also varies based on income and inflation and on specific facility characteristics such as the degree of overcrowding and the mix of machine denominations. Publicly available statistics on win per admission and other primary research conducted by The Innovation Group is used as the foundation for this analysis.
- Attraction Factors. Attraction factors measure the relative attraction of one casino in relation to others in the market. Attraction factors are applied to the size of the casino as measured by the number of positions it has in the market. Positions are defined as the number of gaming machines, plus the number of gaming seats at the tables. A normative attraction factor would be one. When this is applied to the number of positions in a casino, there is no change in the size of the casino as calculated by the model and hence its attraction to potential patrons. A value of less than one adjusts the size of the casino downwards and therefore makes it less attractive. Conversely, a value greater than one indicates that the casino has characteristics that makes it more attractive and hence adjusts its calculated size upwards. Due to the complexity of the issues involved, attraction factors in this case are composed of a number of components; each assessed individually, and then combined in an average. This

provides for explicit consideration of each of these factors. The sensitivity of the model to changes in the factors is not in the nature of a direct multiplication. For example, a doubling of the attraction factor will not lead to a doubling of the gamer visits attracted to the site. It will however cause a doubling of the attractive power of the casino, which is then translated via non-linear equations into an increase in the number of gamer visits attracted to the casino. This is based upon the location, size and number of competing casinos and their relationship to the market area to which the equation is applied. The variation of these factors is based upon The Innovation Group's experience in developing and applying these models, and consideration of the existing visitation and revenues. While this does not provide directly convertible measures to calculate the attraction factors, it does provide guidance on the direction and degree of variation. This represents the "art" rather than the science of modeling. Attraction factors for this market are as low as 0.75 and as high as 1.1. These variations reflect the attractiveness of the facility to gaming patrons. For example, a slot parlor adjacent to a convenience store could probably have an attraction factor as low as 0.75, while a Class III land-based facility with moderately developed amenities would have an attraction factor as high as 1.1.

The demand analysis process is composed of the following steps:

Market Area Definition. This step defined the geographic market region analyzed. This area is subdivided into sub-markets which reflect patterns of visitation and the influence of existing and potential future competition. Demographic data is obtained by postal code for each of the sub-markets for input into the demand model. This data is obtained for current year estimates and future projections and takes into account the future possible locations of competition and potential new sites; then market areas are defined. These reflect access to gaming opportunities and provide sufficient flexibility to model future demand patterns. The distribution of these gamer visits coupled with considerations of equality of access to gaming opportunities, natural boundaries, access and potential future gaming sites and competition drives the development of sub markets. The model is then geographically segmented to allow us to address changing market dynamics as new competitors come on line.

**Trip Generation**. The next step in the analysis is to generate gamer visits from each of the geographic market segments. This is done initially based upon our experience and follows the typical pattern of declining propensity and frequency the further away from a casino venue a market area is. Propensity and frequency factors are assigned for each market area and are combined into a participation rate that is applied to the adult population in each of the postal codes within that geographic market segment.

**Trip Distribution.** Through application of the gravity model, the generated gamer visits in each postal code are distributed among the various competing locations. This distribution is dependent upon the distance from the postal code in question and the size and attractiveness of the competing casinos.

**Revenue Estimation.** A win per visit is then applied by sub-market to the generated gamer visits based on income variations and frequency of visit, thus, deriving the total gaming revenue for each competing location.

Model Calibration & Future Year Normative Projections. To ensure that the model is accurately representing the dynamics of the market, it is calibrated to mirror existing revenues at each facility and its competitors, and the distribution pattern of gamer visits among the geographical market segments. This entails adjusting the total number of gamer visits by changing propensity and frequency factors until the universe of gamer visits approaches that which is required to generate observed regional revenues. Of course, in the case of Bermuda, no casing gaming exists, and as such the calibration process is greatly simplified. Next, an iterative process of adjustments is made to attractions factors and friction factors. Attraction factors refer to the overall attraction value of the casino and incorporate such elements as the presence and size of amenities, location, access, and gaming type. Friction factors work at the individual geographic market level making it harder or easier to travel from that market to a specific casino venue. These reflect the observed patterns of visitation and account for elements such as geographic boundaries, ease of access, congestion, speed of travel and other idiosyncrasies of the market place. Projections for future years are derived by replacing current year demographics with future year demographics, inflating the win per visit, and adjusting gaming participation rates incrementally to account for growing acceptance.

# Proposed Locations

The Innovation Group was asked to consider several possible scenarios for potential gaming in Bermuda. These not only included what the optimal number of licenses might be but where they might be located in an effort to provide the most convenient alternatives for tourists (and in an alternative scenario residents also) Potential locations include a casino based in Hamilton, the Dockyard, and St. George, as well as casinos established at existing hotel properties and possibly in bars or taverns. Scenarios were defined in order to provide insight into different operating environments that were discussed during meetings with government officials and tourism industry professionals and incorporate The Innovation Group's knowledge of existing gaming markets, the most prominent being discussed in case studies within this report.

These scenarios are defined in the following table and elements included in each respective scenario are marked with an "X". In scenario 1, a single casino in Hamilton was selected as the only location to offer gaming. This casino is listed as "Independent" as it is not assumed to be part of a hotel. Scenario 2 adds independent casinos in Dockyard and St. George. Scenario 3 further adds casinos at large hotels, defined as hotels with 100 rooms or more. Scenarios 4 and 5 both remove independent casinos while 5 adds gaming at small hotels. Scenario 6 considers one casino in Hamilton and gaming in large hotels.

Scen	nario Summary					
Scenario	1	2	3	4	5	6
Independent Casinos Hamilton	Х	X	х			X
Dockyard		X	X			
St. George Hotel Casinos		X	X			
Large Hotels <sup>1</sup>			X	X	X	X
Small Hotels <sup>2</sup>					X	

Source: The Innovation Group

Independent casinos were assumed to be located in central areas accessible from cruise ship docking facilities, water shuttle terminals, taxi stands, and the public bus system. These facilities as well as those located in hotels were assumed to be visible with signage guiding potential patrons and organized and clean in their appearance. Ingress and egress for vehicles was assumed to be adequate at times of peak visitation with ample parking for guests.

### Additions to Hotel Supply

The following table provides our estimates of the proposed hotel inventory that was used in our modeling process. The inventory is listed by region as is further defined in the Market Area Definition section of this report, which immediately follows this discussion. These supply additions are based on public announcements and include those properties deemed likely to move forward either due to their current status or expected and/or assumed changes in the financing and tourism markets. Anticipated additions to room supply includes fractional ownership interests and is estimated at 1,003 rooms.

Large Hotels are defined as including over 100 rooms and include Elbow Beach, Fairmont Southhampton, Fairmont Hamilton, Grotto Bay, Newstead Belmont, Tucker Point and the proposed Hyatt

<sup>2)</sup> Small Hotels include properties with less than 100 rooms

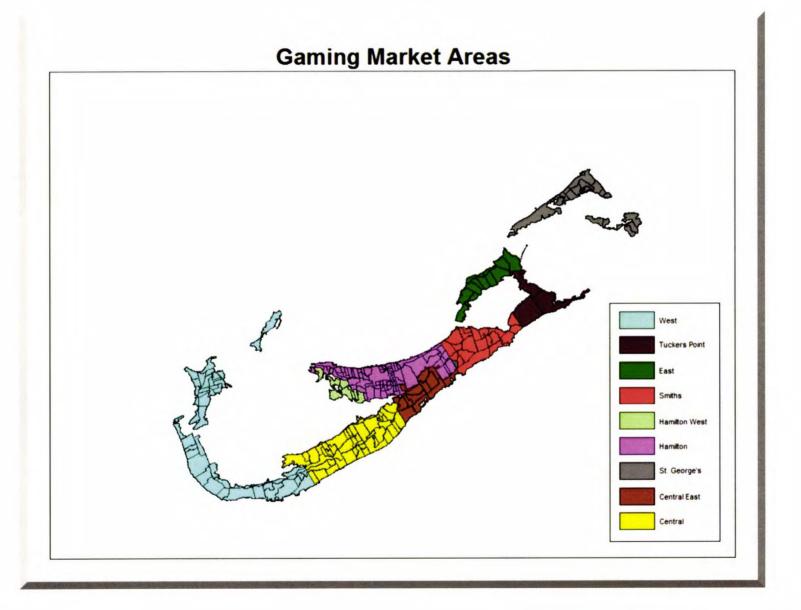
**Assumed Additions to Bermuda Hotel Room Supply** 

	West	Tucker's Point	East	Smiths	Hamilton West	Hamilton	St. George	Central East	Central
Park Hyatt							280		
Coco Reefs									66
Coral Beach Club									170
Coral Beach/Horizon Ltd./Four									
Seasons									230
Southampton Beach Resort	150								
The Reefs	19								
Tucker's Point Club		88							
Total Proposed Room Supply	169	88	0	0	0	0	280	0	466

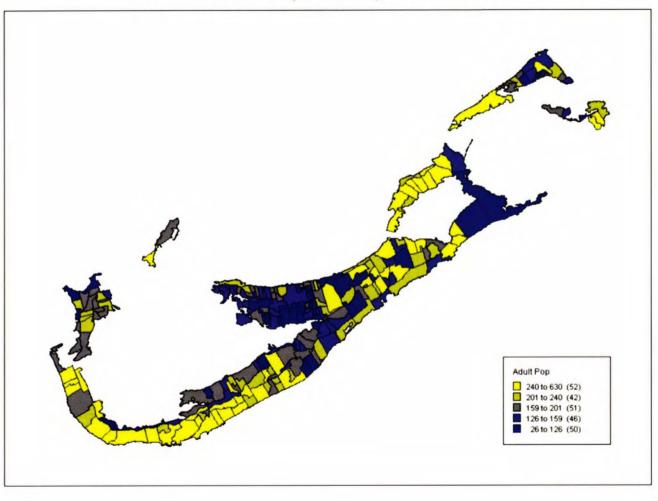
Source: The Innovation Group

#### Market Area Definition

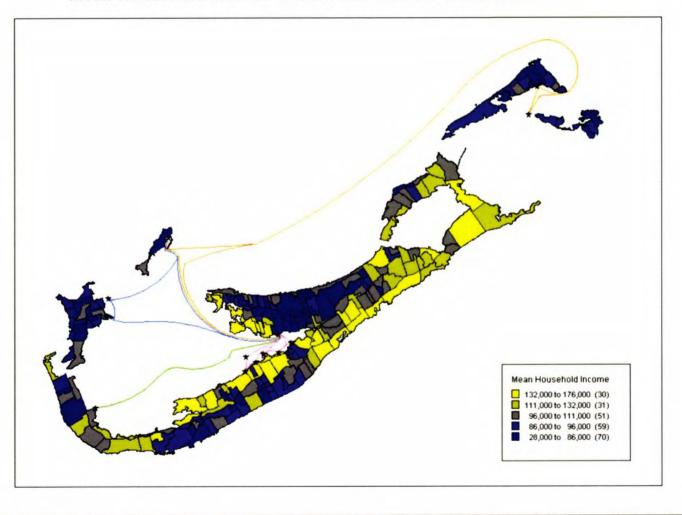
Before determining actual gaming revenues generated by the local market, individual market segments must first be defined. In defining the local market, particular attention is paid to the pattern of roadway transportation, terrain, population density, and potential competitive facilities. The purpose of this section is to disaggregate the market area into component parts based upon proximity to the proposed casino locations and population density. The map that follows shows the defined market areas, with second and third maps showing the adult population and mean household income by census district.



# Bermuda's Adult Population by Census District



## Mean Household Income of Bermuda's Census Districts



Census data was provided by census district for the year 2000, the most recent census. The Bermuda Department of Statistics publication *Mid-Year Population Projections July 1, 2000 to July 1, 2030* provides population growth rates by age cohort. Growth for the population aged 20+ averaged 0.65% from 2000-2007 and 0.56% from 2007-2011. These growth rates were applied to the populations of the market areas and are detailed in the table below.

Market Carveout Adult (21+) Population

	2007	2008	2009	2010	2011	A.A.G. 2007-2011
West	10,329	10,386	10,444	10,502	10,561	0.56%
Tuckers Point	289	290	292	294	295	0.56%
East	3,646	3,666	3,687	3,707	3,728	0.56%
Smiths	4,544	4,569	4,595	4,620	4,646	0.56%
Hamilton West	1,116	1,122	1,128	1,134	1,141	0.56%
Hamilton	12,096	12,164	12,231	12,299	12,368	0.56%
St. George's	3,902	3,924	3,946	3,968	3,990	0.56%
Central East	2,286	2,298	2,311	2,324	2,337	0.56%
Central	9,762	9,816	9,871	9,925	9,981	0.56%
Total	47,969	48,236	48,504	48,774	49,046	0.56%

### Projected Local Gaming Market Totals

The table on the following page shows the estimated propensities and frequencies for each scenario. In Scenario 1, which assumes one casino is built in Hamilton, the adults living closest to the casino are assumed to exhibit the strongest gaming behavior, with other market areas exhibiting lower gaming behavior due to greater distances between themselves and the casino, as discussed in the Methodology section of this report. This casino is assumed to be independent, meaning that it is not associated with a hotel. In Scenario 2, which includes the casino in Hamilton as well as independent casinos at the Dockyard and St. George, gaming behavior rises in the area immediately surrounding the additional casinos, with a smaller increase in adjacent markets. Given the size of the island and proximity of markets to one-another, Scenario 2 results in increased gaming behavior in almost all markets. Scenario 3 evaluates the potential for three independent casinos in Hamilton, the Dockyard, and St. George and at the large hotels. Due to the number of casinos and the distribution of the properties throughout the island, gaming behavior increases relative to Scenarios 1 and 2 and is ultimately the highest of the six scenarios.

Scenarios 4 and 5 focus on hotels and do not include the potential for large, independent casinos established in Hamilton, the Dockyard, and St. George. Scenario 4 includes casinos located only at large hotels. This results in seven potential locations, Elbow Beach, Fairmont Southhampton, Fairmont Hamilton, Grotto Bay, Newstead Belmont, Tucker Point, and the proposed Hyatt. Relative to Scenarios 1 and 2, more locations with a broadly dispersed over the island result in stronger gaming behavior. However, compared to Scenario 3, there are three fewer casinos and therefore a lower level of play. Scenario 5 adds casino gaming at the small hotels in addition to large hotels. Many of these smaller properties likely do not have the space to offer casino gaming. Others, given the opportunity, may develop a modest offering while hotels that approach 100 rooms may have more space to develop casinos that are relatively small compared

to larger hotels. For these reasons, smaller hotels are not believed to lead to a substantial increase in play among Bermudians, and therefore local gaming behavior was assumed to be identical to Scenario 4. Scenario 6, the final scenario, assumes that an independent casino is established in Hamilton and at large hotels.

The following table shows our estimates of local market propensity and frequency as defined earlier. These metrics vary in each scenario primarily based on the proximity of gaming options to the population living in a specific market. When applied to the local population of each market, the total number of gamer visits will be generated and distributed based on the methodology as described above.

**Estimated Local Market Gaming Behavior** 

Market	Scen	ario 1	Scen	ario 2	Scen	ario 3	Scen	ario 4	Scen	ario 5	Scen	ario 6
	Propensity	Frequency										
West	26.5%	9.0	41.0%	13.5	42.0%	14.0	36.0%	11.5	36.5%	12.0	39.5%	12.5
<b>Tuckers Point</b>	30.5%	9.5	35.5%	10.5	39.0%	12.5	38.0%	12.0	38.5%	12.0	38.5%	12.0
East	26.5%	9.0	35.5%	10.5	36.5%	11.0	30.5%	9.5	32.0%	10.0	35.5%	10.5
Smiths	33.5%	10.5	35.5%	10.5	37.5%	11.5	34.5%	10.5	34.5%	11.0	35.5%	10.5
Hamilton West	39.5%	13.0	40.0%	13.0	42.0%	14.0	38.0%	12.0	38.5%	12.5	42.0%	14.0
Hamilton	40.5%	13.5	41.0%	13.5	41.0%	13.5	37.5%	12.0	38.0%	12.5	41.0%	13.5
St. George's	26.5%	9.0	41.0%	13.5	42.0%	14.0	38.0%	12.0	38.5%	12.5	39.5%	12.5
Central East	33.5%	10.5	35.5%	10.5	39.5%	12.5	34.5%	10.5	34.5%	10.5	38.5%	12.0
Central	33.5%	10.5	35.5%	10.5	39.5%	12.5	38.0%	12.0	38.5%	12.5	38.5%	12.0

In order to project gaming revenue from the local market area, The Innovation Group examined each scenario based on assumed marketing, probable building plans, and game mix. The number of slot machines and table games at each location was based on forecasted demand. Average win is based on the overall attractiveness and variety of games that the estimated slot and table count will reasonably permit management to offer as well as income and cost of living levels.

It should be noted that the numbers that follow are based solely on projections for the local market and do not take into account gaming revenue generation based on tourism, which is detailed in the following section.

**Estimated Local Market Gaming Revenue** 

Market		Scenario 1			Scenario 2			Scenario 3		
	Visits	Avg. Win	Revenue	Visits	Avg. Win	Revenue	Visits	Avg. Win	Revenue	
West	25,187	\$120	\$3,022,461	58,453	\$100	\$5,845,325	62,097	\$90	\$5,588,701	
Tuckers Point	856	\$150	\$128,351	1,101	\$145	\$159,613	1,439	\$140	\$201,422	
East	8,891	\$115	\$1,022,441	13,895	\$110	\$1,528,489	14,967	\$110	\$1,646,381	
Smiths	16,342	\$125	\$2,042,715	17,317	\$124	\$2,147,351	20,035	\$123	\$2,464,325	
Hamilton West	5,857	\$150	\$878,491	5,931	\$150	\$889,611	6,707	\$150	\$1,005,945	
Hamilton	67,621	\$85	\$5,747,803	68,456	\$85	\$5,818,763	68,456	\$85	\$5,818,763	
St. George's	9,516	\$100	\$951,600	22,084	\$92	\$2,022,754	23,461	\$90	\$2,111,476	
Central East	8,220	\$140	\$1,150,770	8,711	\$140	\$1,219,473	11,538	\$135	\$1,557,641	
Central	35,107	\$110	\$3,861,795	37,203	\$110	\$4,092,350	49,280	\$105	\$5,174,386	
Total	177,597	\$106	\$18,806,426	233,152	\$102	\$23,723,729	257,979	\$99	\$25,569,038	

Source: The Innovation Group

**Estimated Local Market Gaming Revenue - Continued** 

Market		Scenario 4			Scenario 5		Scenario 6		
	Visits	Avg. Win	Revenue	Visits	Avg. Win	Revenue	Visits	Avg. Win	Revenue
West	43,721	\$80	\$3,497,690	46,256	\$78	\$3,607,944	52,143	\$95	\$4,953,609
Tuckers Point	1,347	\$140	\$188,528	1,364	\$137	\$186,233	1,364	\$143	\$194,419
East	10,801	\$114	\$1,231,347	11,929	\$111	\$1,325,902	13,895	\$111	\$1,542,384
Smiths	16,830	\$124	\$2,081,964	17,631	\$124	\$2,186,237	17,317	\$124	\$2,138,692
Hamilton West	5,201	\$150	\$780,120	5,489	\$146	\$802,782	6,707	\$150	\$1,006,004
Hamilton	55,655	\$90	\$5,006,603	58,747	\$88	\$5,155,074	68,456	\$85	\$5,818,763
St. George's	18,194	\$93	\$1,692,053	19,202	\$91	\$1,741,103	19,700	\$91	\$1,792,729
Central East	8,465	\$140	\$1,185,122	8,465	\$140	\$1,185,122	10,796	\$138	\$1,484,469
Central	45,512	\$108	\$4,915,311	48,032	\$105	\$5,057,798	46,111	\$108	\$4,986,903
Total	205,726	\$100	\$20,578,738	217,115	\$98	\$21,248,195	236,490	\$101	\$23,917,974

The visitor segment is divided into three sub-segments: base visitation, induced visitation, and junket visitation. Each of these is described in detail in the sections that follow.

#### **Base Visitation**

Base visitation is the forecasted visitation to Bermuda that currently exists without the potential addition of gaming. Gaming behavior among these tourists was forecasted using a gravity model to distribute gamer visits throughout the island. Information on the location of existing hotels, proposed hotels, and residences (for those staying with friends or family) was used on a pro-rata basis to distribute visitors geographically about the island. Those points of accommodation were used as the source of casino visits for tourists, from which those visits were allocated to the assumed facilities within each scenario. The hotel inventory used in our modeling process was not exhaustive, as full data was not available. However, in this particular part of the modeling process over 90% of the existing hotel inventory and 100% of the forecasted hotel inventory was used to distribute the forecasted number of guests throughout the island.

In the Tourism section of the report, air arrivals in Bermuda were projected at 275,755 in 2011 by the WTTC. This figure is based on growth in the existing visitor market and is called the "base" visitation segment. It is composed of overnight visitors in hotels, overnight visitors in homes of friends and family, and cruise visitors. Due to the recent severity of the economic contraction and its effect on tourism, The Innovation Group used a more conservative estimate of 245,045 air arrivals in 2011.

Based on existing visitor characteristics, we assume that 88% of visitors in 2011 will stay in pay lodging (215,639) and 89% of visitors are age 21 or older (191,919). These potential gamers are distributed among nine hotel markets based on the fair share of rooms projected to be available in 2011. Of these hotel markets, the West hotel market is expected to attract 67,220 potential gamers in 2011.

In addition to these potential gamers in pay lodging, 12% of visitors to the island stay with friends and family. These visitors are distributed among the markets based on the distribution of the local population.

The following table shows the estimated total adult base visitors staying overnight at hotels or with friends and family in 2011.

Potential Adult Visitors: 2011

Hotel Markets	West	Tuckers Point	East	Smiths	Hamilton West	Hamilto n	St. George's	Central East	Central	Total
Hotel Rooms 2011	1,082	208	213	0	526	32	365	5	1,040	3,471
% of hotel rooms 2011	31.2%	6.0%	6.1%	0.0%	15.2%	0.9%	10.5%	0.1%	30.0%	100%
BASE Arrivals (2011 Est.) BASE Island										245,045
Visitors in Pay Lodging BASE Island	67,220	12,922	13,233	0	32,678	1,988	22,676	311	64,611	215,639
Visitors in Pay Lodging over 21 Island Visitors	59,826	11,501	11,777	0	29,084	1,769	20,182	276	57,504	191,919
staying with family, over 21*	5,677	153	2,018	2,438	578	6,667	2,195	1,196	5,248	26,171
Total BASE Over 21	65,504	11,654	13,795	2,438	29,662	8,436	22,377	1,473	62,751	218,090

\* Allocated by population distribution

Source: The Innovation Group

Based on scheduled cruise stops provided by the Bermuda Department of Tourism, the total number of cruise visitors adult cruise visitors to Bermuda is estimated at 338,715 in 2011. These visitors will arrive at one of the three cruise terminals listed in the table below.

**Base Visitors: Cruise Visitors 2011** 

Visitors
333,804
3,593
1,318
338,715

Source: The Innovation Group

The size of the adult base visitor segment is assumed to remain constant, by definition, at 245,045 for overnight visitors and 338,715 for cruise visitors, across all scenarios. The capture rate of these segments will vary depending on the attractiveness of the casino gaming outlined in the scenarios and the individual markets' relative distances from the gaming locations.

An exit survey collected in the summer of 2008 asked visitors to Bermuda about their probability to gamble if gaming was offered on the island. Their responses were applied to the 2008 estimation of adult overnight visitors as shown in the table below. Each response was assigned a probability based on the strength of their response and our knowledge of players' behavior in other gaming markets. This resulted in an overall propensity of 28.3% for the visitor population in 2008.

**Propensity Calculation - All Visitors** 

	% Responding	Visitors (2008 Est.)	Likelihood of Playing	Potential Gamers	Propensity
Definitely	14%	39,825	95%	37,834	
Probably	18%	51,204	65%	33,282	
Probably not	23%	65,427	10%	6,543	
Definitely Not	43%	122,320	0%	0	
Don't Know/depends	2%	5,689	50%	2,845	
TOTAL	100%	284,465		80,504	28.30%

Source: Bermuda Department of Tourism, Summer 2008 exit survey and 2008 arrivals statistics; The Innovation Group estimates

The propensity of 28.3% was applied to each of the hotel market areas and was then adjusted up or down within 2% depending on the scenario. Frequency factors were assigned and ranged from 1.0 to 2.5 for each hotel market area. The average win per visit for this sub-segment was \$200.

Cruise visitors were assigned a propensity of 2-12%, depending upon the scenario, and lower frequencies based on the shorter length of stay, as vessels typically dock for an average of three days. Propensity is also lower than that of overnight visitors due to the operation of small casinos on most cruise ships. The average win per visit assigned to this sub-segment was \$98.

The following table identifies the size of the base visitor market, the capture of gamers and gamer visits, and the gaming revenue generated by this segment. These figures will be combined with the induced and junket visitors to create a blended propensity, frequency, and win.

**Estimated Base Visitors Capture and Gaming Revenue** 

Market	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Total Population	549,050	549,050	549,050	549,050	549,050	549,050
Gamers	78,853	86,985	87,779	71,977	72,906	87,779
Visits	116,825	160,146	164,970	154,820	157,143	164,970
Gaming Revenue	\$18,855,134	\$26,116,627	\$26,985,063	\$26,504,384	\$26,922,393	\$26,985,063

Source: The Innovation Group

#### Induced Visitation

The possibility to attract induced visitation as a result of the introduction of casino gaming is potentially a significant source of growth for the tourism industry in Bermuda. Several other destinations, including Atlantic City, Las Vegas, Puerto Rico, Macau, and the Bahamas have attracted new visitors with the introduction of gaming or the addition of significant additions to supply.

While overnight visitation to the Caribbean has grown at a 3.78% A.A.G. between 1988 and 2008, overnight visitation to Bermuda declined at a 0.31% A.A.G. However, the last five years represent an improvement for Bermuda, with overnight visitation growing at a 2.65% A.A.G. between 2003 and 2008. This promising improvement will likely be under pressure in the near

term due to economic conditions in key feeder markets including the United States (approximately 75% of visitation), Canada (9%), and the United Kingdom (9%).

These feeder markets represent opportunities for growth, and tourism demand from traditional tourism feeder markets could increase significantly if casino gaming were added to the offering. Although many countries in the Caribbean region have some casino gaming, the proposed offering(s) would be more proximate to key cities where North America flights originate, thereby offering shorter travel times to tourists that tend to take short trips. The familiarity with gaming, and the acceptance and affinity for casino gaming, as well as lotteries, will enhance the existing attractiveness of Bermuda as a destination and will induce incremental visitation from this additional market. Based on the source of the existing foreign visitation, the potential for air service growth, the assumption of resumed economic growth prior to opening, and improvements in travel infrastructure, it is projected that the development and opening of the proposed casino(s) will likely induce tourism growth based on current visitation levels. With regards to research conducted in the United States, The Innovation Group's Portrait of American Gamers and the Leisure Travel Monitor estimate that 25% of Americans prefer gaming as an amenity on a leisure trip and consider gaming when making travel plans.

The Innovation Group therefore considered these key sources of visitation, which feature direct air service, independently of other sources. The following table shows the foundation of our analysis for the U.S. market. Specifically, data from the Harrah's Profile of the American Gambler, which profiles gamers, was used. That survey provides the estimated population age 21 and over of legal gaming age and the participation rate, or percentage that participate in gaming. The frequency, or average number of trips taken annually, is estimated based on previous surveys and national averages. In total, a total of 60.1 million gamer trips are made from the key U.S. markets that currently feature direct air service to Bermuda.

Total Gaming Trips: Key U.S. Markets

	2006 Population 21+	Participation Rate	Frequency	2006 Gaming Trips
Miami Market	3,073,237	30.0%	8	7,375,769
Atlanta Market	4,076,401	15.0%	3	1,834,380
Philadelphia Market	5,499,873	33.0%	8	14,519,665
New York Market	14,806,436	33.0%	6	29,316,743
Boston Market	4,506,221	26.0%	6	7,029,705

Source: Harrah's Survey of the American Gambler 2006, The Innovation Group

Each of these markets feature gaming options within driving distance. These proximate options are expected to attract the majority of the gaming trips from their respective markets. The Innovation Group therefore turned its analysis to destinations that require air travel for the key markets. The following table shows arrivals to Las Vegas for 2006, the same year as detailed above. The range of market share of outbound trips from the respective markets range from a low of 2.0%, for Philadelphia, which at the time had Atlantic City as a major destination approximately one hour away as well as other facilities located in Delaware, New York, and West Virginia. The high end of the range was 17.1% market share from the Atlanta market. Not surprisingly, Atlanta has the least proximate gaming options. The nearest facility is the Harrah's

Cherokee facility, located in Cherokee, North Carolina approximately 3 hour's drive from Atlanta.

Key U.S. Market Penetration: Las Vegas 2006

	Total Gaming Trips	Commercial Air Visits to Las Vegas	Share of Total Gaming Trips
Miami Market	7,375,769	363,590	4.9%
Atlanta Market	1,834,380	314,160	17.1%
Philadelphia Market	14,519,665	295,900	2.0%
New York Market	29,316,743	945,555	3.2%
Boston Market	7,029,705	365,535	5.2%
Total	60,076,262	2,284,740	3.8%

Source: Harrah's Survey Profile of the American Gambler 2006, Las Vegas Convention and Visitors Bureau, The Innovation Group

Statistics for visitation from the key U.S. feeder markets was available for 2005 and adjusted for 2006 based on national visitation levels. Based on surveys completed by the Bahamas Ministry of Tourism, in 2006 38% of all stop over tourists to Nassau/Paradise Island visited the Atlantis casino and 20% visited the Crystal Palace casino, where the majority of all visitation is accommodated. For this reason, and in an effort to be conservative, The Innovation Group estimates that 28% of all trips to the Bahamas are attributable to the presence of casino gaming. The resulting estimated share of gaming trips from those key outbound markets is shown in the final table and is significantly lower compared to Las Vegas. In particular, the range runs from 0.09% for Philadelphia to 0.35% for Atlanta. These cities likely form the range for market penetration for reasons similar to Las Vegas.

Key U.S. Market Penetration: Bahamas 2006

	2006 Market Gaming Trips	Estimated 2006 Bahamas Trips	Estimated 2006 Bahamas Gaming Trips	Share of Outbound Gaming Trips
Miami Market	7,375,769	65,473	18,332	0.25%
Atlanta Market	1,834,380	22,634	6,337	0.35%
Philadelphia Market	14,519,665	44,939	12,583	0.09%
New York Market	29,316,743	209,298	58,603	0.20%
Boston Market	7,029,705	26,643	7,460	0.11%

Source: Harrah's Survey Profile of the American Gambler 2006, Bahamas Department of Tourism, The Innovation Group

Market penetration rates for Las Vegas and the Bahamas were used as the foundation to project the performance of the proposed Bermuda facilities. In the discussion that follows, it was assumed that Scenario 3 is developed and that the properties and Bermuda Department of Tourism both undertake significant marketing efforts both on the island and in the key source markets for visitation. Scenario 3 was chosen since the highest number of operators and the largest number of positions is assumed to induce the highest level of visitation, as is consistent with behavior observed in existing gaming markets.

As another island destination within proximity to the eastern seaboard of the United States, the ability of Bermuda to attract gamer visits was considered to be most similar to that of the Bahamas. In terms of competitive positioning, Bermuda will benefit from its closer location.

This will be offset by the Bahamas established customer base as well as the established customer base of the Atlantis property, which attracts significant visitation from the Northeast part of the United States. Visitation to the Bahamas is facilitated by greater flight frequency, and although these flights may be longer from some key markets, the convenience and lower costs will outweigh the longer flight times for some clients. The final consideration is weather patterns in the two destinations. Whereas the Bahamas features warmer weather in winter months when the Northeast is cold, Bermuda features mild winters that do not appear quite warm enough to attract peak visitation during the colder winter months.

For the Miami market, penetration was assumed to be the lowest of all key U.S. markets. The penetration rate of 10% of the Bahamas' performance is based on the fact that many Bahamas trips from the Florida market are based on wholesale liquidators and that several casino trips are based on the Discovery Sun, a vessel that sailed between Fort Lauderdale and the Isle of Capri casino on Grand Bahama at the time. While this level of accessibility will not be available for Bermuda, favorable summer weather will be featured on the island, when the Miami area can become exceptionally warm. It was estimated that Bermuda will penetrate the Atlanta market at a rate of 40% when compared to the Bahamas. As previously mentioned, the nearest gaming option for Atlanta residents is a 3-hour drive from the city. With fewer proximate gaming options the ability of Bermuda to attract gamers was assumed to be considerably higher. However, the ability to match the Bahama's performance was offset to a few factors, including lower frequency of flights and longer flight times. For points from the Northeast, Boston, New York, and Philadelphia, it was assumed that penetration rates would be relatively high due to the short flight times, relatively favorable weather, and assumed marketing efforts.

**Market Penetration Summary and Forecast** 

	Total Gaming Trips	Las Vegas Penetration	Bahamas Penetration	Estimated Premium/ Discount to Bahamas Penetration	Bermuda Penetration
Miami Market	7,375,769	4.9%	0.25%	25%	0.06%
Atlanta Market	1,834,380	17.1%	0.35%	70%	0.24%
Philadelphia Market	14,519,665	2.0%	0.09%	55%	0.05%
New York Market	29,316,743	3.2%	0.20%	55%	0.11%
Boston Market	7,029,705	5.2%	0.11%	55%	0.06%

Source: Harrah's Survey Profile of the American Gambler 2006, Las Vegas Convention and Visitors Bureau, Bahamas Department of Tourism, The Innovation Group

Growth in gamer visits for each of the five U.S. key markets is shown below. Over this time frame, the three pari-mutuel facilities in Miami Dade County will be adding slot machines to their facilities. This will lead to significant growth in gaming visitation in that market, such that on a compounded annual basis growth is forecasted at 6%. Although some development in Georgia has been proposed under the state's lottery legislation, gaming has been opposed for some time and would require legislative approval. As this is unlikely, growth in gaming visits is forecasted at 1.5%, largely based on continued development in the Biloxi market. Chester Downs, located just outside Philadelphia, has been offering slot machines for just over a year and

will be joined by two other facilities located within the city's boundaries once final arrangements are approved. For this reason, 6% growth has been forecasted in this market. In the New York market, where Yonkers Racetrack recently started and Aqueduct will soon start offering VLTs, growth is forecasted at 8% per year. This slightly higher growth rate relative to other markets is due to the relatively lower existing base of gamer visits originating in this market due to the distance of existing options. Finally, although legislation has been debated for some time, passage is unlikely and therefore 2.5% growth is forecasted in the Boston market. These growth rates and projected penetration rates are shown in the following table, with an estimated 72,175 gamer visits being induced from the United States to Bermuda in this scenario.

Estimated Growth in Gaming Trips and Bermuda Penetration; U.S. Markets

	2006 Trips	Estimated Growth, 2006- 2011	2011 Trips	Estimated Penetration Rate	2011 Gamer Trips
Miami Market	7,375,769	6.0%	9,870,442	0.06%	6,133
Atlanta Market	1,834,380	1.5%	1,976,149	0.24%	4,779
Philadelphia Market	14,519,665	6.0%	19,430,587	0.05%	9,261
New York Market	29,316,743	8.0%	43,075,914	0.11%	47,359
Boston Market	7,029,705	2.5%	7,953,466	0.06%	4,642
Total	60,076,262		82,306,558		72,175

Source: Harrah's Survey Profile of the American Gambler 2006, The Innovation Group

Estimated induced gaming trips for U.S.-based markets were used as the foundation for estimated growth from other key markets, specifically Canada, the United Kingdom, Europe, and other markets. These are based on the overall percentage growth relative to estimated base, or existing, visitation to Bermuda in 2008. Other U.S. markets, which currently require a connection for air passengers, were forecasted to grow at 14%, relative to 21% growth forecasted for the Boston market and rates of approximately 95% for Atlanta, New York, and Philadelphia. This relatively lower rate is based on the longer travel time required by connecting flights and times. Growth from Canada is estimated at 18%. This growth is based on the fact that direct flights come from Toronto, a major city in Ontario that will require connecting flights for other Canadians. However, many Canadians have proximate gaming options and participation rates are similar to, if not higher than, those observed in the United States. Residents of the United Kingdom are avid travelers, and although gaming options are limited in their home country, gaming is a frequent pastime during leisure trips. For this reason, 24% growth is forecasted for this market. Continental Europeans tend not to game as much as Britons, on the aggregate, and also have other options in Eastern Europe and Cyprus. Growth from this market was forecasted at 14%. Finally, growth from all other markets was assumed to be relatively modest, and a 9% increase from 2008 visitation levels was assumed to be induced. These assumptions lead to an estimated 96,748 total induced visitors in 2011, the first full year of operations.

**Estimated Induced Gaming Trips** 

	Estimated 2008 Bermuda Trips	Percentage Growth	2011 Gamer Trips
Miami Market	3,718	165%	6,133
Atlanta Market	4,810	99%	4,779
Philadelphia Market	12,761	73%	9,261
New York Market	62,632	76%	47,359
Boston Market	27,780	17%	4,642
Other US Markets	77,687	14%	10,876
Total US	189,388	44%	83,051
Canada	27,176	18%	4,892
UK	29,657	24%	6,969
Europe	5,419	14%	759
Others	11,974	9%	1,078
Total	263,613	37%	96,748

Source: Bermuda Department of Tourism, The Innovation Group

The estimated increase in visitation would represent a 17.6% increase in tourism in 2011. This compares to 9.0% in the Bahamas, 7.4% in Puerto Rico, and 20.2% in Macau as detailed in The Impact of Gaming on Tourism section of this report. Given the relatively high number of assumed facilities and subsequent marketing efforts that would accompany such expansion, incremental visitation should be expected to be higher than was experienced in the Bahamas and Puerto Rico and would approach Macau. In other scenarios, induced visitation is expected to be diminished relative to Scenario 3.

The induced gamers are assigned a propensity of 90%, a frequency of 2.5, and a win per visit of \$350. The estimated number of induced visits varies by scenario depending upon the size and scope of gaming in each scenario as shown in the table below. These figures will be combined with the base and junket visitors to create a blended propensity, frequency, and win.

**Estimated Induced Visits and Gaming Revenue** 

Market	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6				
Total Population	53,325	62,888	96,748	89,125	89,125	96,748				
Gamers	47,992	56,599	87,074	80,212	80,212	87,074				
Visits	119,980	141,497	217,684	200,531	200,531	217,684				
Gaming Revenue	\$37,193,866	\$43,864,216	\$67,482,025	\$62,164,677	\$62,164,677	\$67,482,025				

Source: The Innovation Group

## Junket/Player Development Visitation

Thus far, casino visitation from beyond the local market area has been estimated from the base and induced tourism markets. Expansion of the visitor market could potentially be accomplished

by drawing on the "junket market" and by player development activities of individual hotel owners/operators (under the scenarios where hotels have license) or by player development activities of any stand-alone casinos. This term has several definitions, however not all fit the Bermuda market appropriately in terms of the potential feasibility for growth.

One definition of a junket program deals mainly with high-level VIP gaming, or a hosting program, with gamers coming on special invitations with premium level service and accommodations, and high wins per visit. Gamers in this classification are generally high-wealth individuals, for whom a typical gaming trip budget would be in excess of \$100,000. A similar definition but different target customer would be mid-level serious gamers, for whom gaming budgets of approximately \$50,000 may be the norm, where high quality customer service is expected and non-gaming amenities are not major concerns, but for which individual attention may not be a necessity. A third junket group includes group tours of casual players. Players in this segment have a smaller gaming budget and place importance on non-gaming amenities.

Casino junkets operate with varying levels of success throughout the world. Major international gaming markets such as Las Vegas and Macau rely heavily on junkets for both VIP play and group tours. In both of these markets, a full gamut of junket types is utilized. Tour groups as well as individual private jets are common for both markets. In Macau the tour group historically was the major source of visitation, as individual visas from Mainland China were not available until 2004. As a result, by default it was necessary to set up a large number of junkets. The range in hotel room quality and price is broad in Macau, with many Chinese visitors being comfortable in 2 and 3-star properties, such that the cost of attracting the more casual junketeers is relatively low, especially considering the fact that table-side comps and food comps are atypical. In Las Vegas, the range in junkets is equally broad, with some being whales coming from domestic or international markets, and others being large group tours, such as the charter planeloads from Hawaii that arrive several times per week. These gamers are not counted on for exceptionally high wagering, but frequency, casino loyalty, and a higher than average spend per visit makes this market segment attractive.

Several other smaller junket markets have also been successful. The Dominican Republic is a popular destination for casual European gamers, and other Caribbean islands with gaming have sought out the junket market to supplement the base tourism and local population for revenue growth. Marrakech is popular for Arab gamers, with casinos in top-tier hotels. The Bahamas is popular for junket gamers from both the U.S. and abroad. Greece and Turkey historically were successful in attracting Israeli gamers. The common theme in each of these markets is that they are popular for tourism independent of the availability of gaming. As a result, junkets with casual gamers are relatively easy to market, as the locations have much to offer outside of gaming.

The type of junket marketing recommended for Bermuda is a "player development" program where certain high-budget individuals, who would otherwise be categorized in one of each of the junket markets previously listed, are identified and invited to game in Bermuda. Individual airline tickets are recommended for this program rather than group tours or private jets in order to reduce costs.

The number of junket visitors invited to play in Bermuda is estimated to vary across scenarios from 4,752 in Scenario 1 to 9,504 in Scenario 3. Some of these gamers may be traveling with a non-gaming spouse, so the propensity was assigned at 95%. The frequency was estimated at 2.5 and an average win, at \$500. These figures will be combined with the base and induced visitors to create a blended propensity, frequency, and win.

**Estimated Junket Visits and Gaming Revenue** 

Market	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6		
Total Population	4,752	5,940	9,504	7,128	7,128	7,914		
Gamers	4,514	5,643	9,029	6,772	6,772	7,518		
Visits	11,286	14,108	22,572	16,929	16,929	18,795		
Gaming Revenue	\$5,643,000	\$7,053,750	\$11,286,000	\$8,464,500	\$8,464,500	\$9,397,281		

## Capture of Visitor Market

The following tables present the blended propensity and frequency for the three visitor sub-markets as well as the resulting number of visits, average win, and total revenue for each scenario.

**Estimated Visitor Market Gaming Behavior** 

Market	Scenario 1		Scenario 2		Scenario 3		Scenario 4		Scenario 5		Scenario 6	
	Propensity	Frequency										
Hotels West	38.1%	2.0	41.5%	2.5	47.3%	2.5	45.9%	2.5	46.2%	2.5	47.1%	2.5
Hotels Tuckers Point	39.0%	1.8	41.1%	2.0	47.8%	2.3	47.0%	2.5	47.1%	2.5	47.6%	2.2
Hotels East	37.4%	1.7	39.3%	1.9	45.7%	2.2	44.9%	2.5	45.0%	2.5	45.5%	2.2
Hotels Smiths	23.7%	1.8	23.7%	2.3	23.7%	2.3	23.7%	2.3	23.7%	2.3	23.7%	2.3
Hotels Hamilton West	40.3%	2.5	42.4%	2.5	48.3%	2.5	46.9%	2.5	47.5%	2.5	48.1%	2.5
Hotels Hamilton	29.3%	2.5	30.0%	2.5	32.2%	2.5	30.0%	2.5	30.8%	2.5	32.1%	2.5
Hotels St. George's	38.0%	1.8	41.3%	2.5	47.1%	2.5	45.7%	2.5	46.3%	2.5	46.9%	2.5
Hotels Central East	27.3%	2.1	27.9%	2.5	30.0%	2.5	29.4%	2.5	29.4%	2.5	29.9%	2.5
Hotels Central	38.2%	2.3	40.2%	2.5	46.7%	2.5	45.9%	2.5	46.0%	2.5	46.5%	2.5
Cruise Terminal - Dockyard	17.0%	1.0	26.0%	1.9	26.3%	2.0	16.0%	1.0	16.0%	1.0	17.5%	1.0
Cruise Terminal - Hamilton Cruise - St. Georges &	25.5%	1.8	26.0%	1.9	27.3%	2.0	22.0%	1.5	22.0%	1.5	26.0%	1.7
Anchor	18.0%	1.2	26.0%	1.9	26.0%	2.0	20.0%	1.4	20.0%	1.4	18.5%	1.4

**Estimated Visitor Market Gaming Revenue** 

Market	Scenario 1			Scenario 2			Scenario 3		
	Visits	Avg. Win	Revenue	Visits	Avg. Win	Revenue	Visits	Avg. Win	Revenue
Hotels West	64,176	\$273	\$17,539,622	90,215	\$259	\$23,380,133	116,603	\$275	\$32,061,713
Hotels Tuckers Point	10,625	\$288	\$3,063,526	12,773	\$287	\$3,671,917	19,408	\$290	\$5,622,135
Hotels East	11,321	\$284	\$3,216,475	13,630	\$283	\$3,859,318	20,675	\$285	\$5,901,346
Hotels Smiths	1,039	\$180	\$186,962	1,298	\$180	\$233,702	1,298	\$180	\$233,702
Hotels Hamilton West	38,780	\$255	\$9,891,264	42,468	\$262	\$11,115,885	55,296	\$277	\$15,336,320
Hotels Hamilton	6,582	\$207	\$1,361,859	6,806	\$211	\$1,436,360	7,587	\$223	\$1,693,117
Hotels St. George's	19,100	\$286	\$5,457,973	30,611	\$259	\$7,919,071	39,513	\$275	\$10,847,700
Hotels Central East	886	\$211	\$187,217	1,096	\$210	\$230,236	1,218	\$222	\$270,354
Hotels Central	69,037	\$263	\$18,182,188	83,756	\$262	\$21,940,285	110,532	\$276	\$30,539,015
Cruise Terminal - Dockyard	23,514	\$98	\$5,568,509	29,392	\$98	\$16,181,432	29,392	\$98	\$16,766,944
Cruise Terminal - Hamilton Cruise - St. Georges &	345	\$98	\$157,338	345	\$98	\$174,174	345	\$98	\$192,155
Anchor	2,687	\$98	\$27,936	3,359	\$98	\$63,891	3,359	\$98	\$65,573
Total	248,091	\$261	\$64,840,869	315,751	\$286	\$90,206,405	405,226	\$295	\$119,530,074

**Estimated Visitor Market Gaming Revenue - Continued** 

Market		Scenario 4			Scenario 5			Scenario	6
	Visits	Avg. Win	Revenue	Visits	Avg. Win	Revenue	Visits	Avg. Win	Revenue
Hotels West	109,497	\$270	\$29,524,625	110,234	\$269	\$29,657,270	115,426	\$273	\$31,472,951
Hotels Tuckers Point	20,452	\$272	\$5,568,163	20,504	\$272	\$5,577,603	19,182	\$287	\$5,508,953
Hotels East	22,129	\$267	\$5,915,357	22,160	\$267	\$5,920,944	20,443	\$283	\$5,785,443
Hotels Smiths	1,298	\$180	\$233,702	1,298	\$180	\$233,702	1,298	\$180	\$233,702
Hotels Hamilton West	51,841	\$272	\$14,102,948	52,509	\$271	\$14,223,079	54,724	\$275	\$15,050,101
Hotels Hamilton	6,997	\$221	\$1,549,748	7,187	\$220	\$1,583,916	7,552	\$222	\$1,675,704
Hotels St. George's	37,116	\$269	\$9,991,843	37,619	\$268	\$10,082,468	39,116	\$272	\$10,649,088
Hotels Central East	1,185	\$218	\$258,630	1,185	\$218	\$258,630	1,212	\$221	\$267,633
Hotels Central	105,114	\$270	\$28,354,552	105,255	\$270	\$28,379,966	109,400	\$274	\$29,973,107
Cruise Terminal - Dockyard	14,696	\$98	\$5,240,950	14,696	\$98	\$5,240,950	29,392	\$98	\$5,732,289
Cruise Terminal - Hamilton Cruise - St. Georges &	276	\$98	\$116,351	276	\$98	\$116,351	345	\$98	\$151,256
Anchor	1,679	\$98	\$36,214	1,679	\$98	\$36,214	3,359	\$98	\$33,498
Total	372,280	\$271	\$100,893,083	374,603	\$270	\$101,311,092	401,449	\$265	\$106,533,726

Source: The Innovation Group

## Revenue Forecast

Combining revenues from all sources, the proposed Bermuda casinos are estimated to generate between \$84 million in Scenario 1 and \$145 million in Scenario 3 in the first full year of operations. The following table summarizes the gaming revenues by market segment:

**Gaming Revenues** 

Switting Tee remains								
Market	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6		
Local Market Revenues	\$18,806,426	\$23,723,729	\$25,569,038	\$20,578,738	\$21,248,195	\$23,917,974		
Visitor Market Revenues	\$64,840,869	\$90,206,405	\$119,530,074	\$100,893,083	\$101,311,092	\$106,533,726		
TOTAL GAMING REVENUES	\$83,647,295	\$113,930,134	\$145,099,112	\$121,471,821	\$122,559,287	\$130,451,699		
Gaming Positions	875	1,656	1,986	1,649	2,388	1,911		
Win per Position	\$262	\$188	\$200	\$202	\$141	\$187		
Win per Visit	\$183	\$167	\$181	\$197	\$195	\$196		
Win per Occupied Room								
(Island-wide)	\$135	\$179	\$208	\$178	\$180	\$188		

Source: The Innovation Group

## Five-Year Expanded Forecast

In each scenario the facility or facilities were assumed to open in 2011, due to the time that would be required to write and pass enabling legislation, award licenses, and establish facilities. The first full year of operations is assumed to be the second year of operations, as the facility or facilities will take some time to gain market acceptance and build a customer base. As such, the first year is discounted in each scenario to a varying degree, based on the number of operations and subsequent marketing efforts that would be established if casino gaming were to move forward. Moreover, we have utilized growth rates normalize as operations establish customer bases and mature.

**Projected Five-Year Revenue Forecast** 

	Year 1	Year 2	Year 3	Year 4	Year 5
Scenario 1	\$76,657,359	\$84,976,565	\$90,151,638	\$93,793,764	\$97,583,032
growth		10.9%	6.1%	4.0%	4.0%
Scenario 2	\$101,348,067	\$114,815,981	\$122,990,879	\$129,841,471	\$135,087,067
growth	W Date date and	13.3%	7.1%	5.6%	4.0%
Scenario 3	\$127,549,517	\$146,104,831	\$158,012,375	\$167,619,527	\$176,101,075
growth	N	14.5%	8.1%	6.1%	5.1%
Scenario 4	\$110,686,032	\$122,698,184	\$132,698,086	\$140,766,130	\$146,453,082
growth	ALDO STORY	10.9%	8.2%	6.1%	4.0%
Scenario 5	\$111,667,035	\$123,785,651	\$133,874,181	\$142,013,731	\$147,751,086
growth	No.	10.9%	8.2%	6.1%	4.0%
Scenario 6	\$118,940,067	\$131,847,985	\$142,593,596	\$151,263,287	\$157,374,323
growth		10.9%	8.2%	6.1%	4.0%

Source: The Innovation Group

## Conclusions

The introduction of casino gaming to Bermuda could generate potential gaming revenues between \$84 million and \$146 million annually (based upon Year 2 revenue forecasts). However, the gaming revenue estimates are only one piece of a complex analysis regarding the overall impact to the country. The forecasts generated in this section will form the basis of further analysis on the overall economic and social impacts that the introduction of gaming might have to Bermuda. For instance, from an Economic Impact perspective, the gaming revenue numbers do not reveal the full impact on overall tourism generation and hotel occupancies. In addition, the introduction of any form of gaming may have hidden social impacts that need to be accounted for and properly addressed.

Bermuda faces a difficult competitive tourism environment. Despite its proximity to the population of major East Coast U.S. cities and its natural beauty, the country has fallen behind many Caribbean and even Central American locations as a choice destination for many tourists. While casino style gaming may not be a panacea to correct Bermuda's tourism challenges, the country is losing out on opportunities by not having casino gaming.

Casino gaming is an industry that is now prevalent throughout the U.S. and Caribbean, and has become socially acceptable for many adults. Casino gaming as an industry is expected to remain strong in the near and intermediate future as the U.S. population ages.

Definitively quantifying the amount of capital investment that might be attracted to the country for additional tourism infrastructure (i.e. additional resorts, rooms, amenities, etc.) should gaming be introduced is difficult as other factors such as the availability of capital influence the outcomes. However, the evidence is clear from other jurisdictions that given the right legislative policies, tax structures and operating environment, casino gaming can be a catalyst for additional tourism development. In order for Bermuda to effectively compete in the tourism arena in the region, it needs to attract additional capital investment. Gaming can be the catalyst that allows new projects to occur as gaming enhances the potential profits and consequently can work in attracting the financing new projects need.

# POTENTIAL FOR AMBIENT MACHINES

At the direct request of the Premier, The Innovation Group was asked to provide insight into the market potential for ambient machines to induce tourism. Ambient machines, such as those widely available in bars and restaurants, were available in Bermuda up until 2005, when the Prohibition of Gaming Machines Act of 2001 (amended in 2004) took effect. Estimates of the number of machines and their performance vary widely, and potentially speculative, and were thus not included in this report. Furthermore, ambiguity surrounding the number of machines made it difficult to generate an estimate of their performance.

Ambient machines do operate in markets where casino gaming is available, most notably West Virginia and Louisiana. In West Virginia, ambient machines are limited to a total of 9,000 statewide, with a limit of 5 being available in each establishment holding a Class A liquor license. The machines themselves are identical to those offered in the casino environments, with the exception that casinos can offer "reel and coin drop machines." In three of four counties that host gaming at race tracks, the larger, centralized casino operations offer less than 20% of the supply in the market with a win per unit of 60% to 75% of the county average. The three facilities, Mountaineer, Wheeling, and Charles Town attract a significant portion of their patronage from metropolitan areas that lie between one and two hours driving time. These metropolitan areas have higher income levels than the areas immediately surrounding the facilities, and given the distance a player must travel to the properties, they also have higher levels of win on a per visit basis. This patronage dynamic, in addition to the fact that the properties feature a wider range of games and amenities, explains the performance of these facilities relative to the surrounding ambient machines. The fourth facility, Tri-State, faces more competition due to the amount of supply offered at surrounding restaurants and taverns as well as the more local nature of its client base. Combined with the fact that ambient machines were illegally established for decades is a major reason why their performance persists in the face of what should be a formidable competitor.

West Virginia Video Lottery Terminal Performance

		Casino			Ambient			County	
	Machines	WPU	Revenue (\$M)	Machines	WPU	Revenue (\$M)	Machines	WPU	Revenue (\$M)
Mountaineer percent of	3,197	\$194.21	\$226.60	508	\$139.70	\$25.90	3,705	\$186.74	\$252.50
county	86.30%	104.00%	89.70%	13.70%	74.80%	10.30%	100.00%	100.00%	100.00%
Wheeling percent of	2,191	\$249.22	\$199.30	497	\$131.75	\$23.90	2,688	\$227.50	\$223.20
county	81.50%	109.50%	89.30%	18.50%	57.90%	10.70%	100.00%	100.00%	100.00%
Tri-State percent of	1,706	\$108.21	\$67.40	742	\$152.84	\$41.40	2,448	\$121.74	\$108.80
county	69.70%	88.90%	61.90%	30.30%	125.50%	38.10%	100.00%	100.00%	100.00%
Charles Town Races percent of	4,739	\$268.64	\$464.70	134	\$159.83	\$7.80	4,873	\$265.65	\$472.50
county	97.30%	101.10%	98.30%	2.70%	60.20%	1.70%	100.00%	100.00%	100.00%

Source: West Virginia Lottery Commission

Although no research has been completed in West Virginia, The Innovation Group has conducted interviews of some operators and understands that no broad tourism marketing effort exists that features ambient machines. Moreover, in terms of a substantial mass capable of attracting tourism independent of advertising, none of the operators we've met with over time have mentioned that tourists are visiting the region in order to play the machines available in bars and taverns. It should be noted, however, there is some incidental play among tourists that visit the bars or taverns.

In Louisiana, video poker machines are permitted in bars, restaurants, and hotels. Each establishment can offer up to three machines which must be physically partitioned from the remaining premises. Machines can only be played by people aged 21 years or over, and prizes are limited. Moreover, no advertising is permitted beyond standard sings that are allowed to be visible on the exterior of properties offering video poker machines. In greater New Orleans, that includes Orleans Parish and Jefferson Parish, four casinos are located and offer slot machines and table games to residents and visitors. In addition to the total 6,125 gaming positions available in casinos, 2,282 slot machines are offered in bars, restaurants, and hotels. The machines do not appear to be very popular in areas where tourists gather, and overall generate less than one-third of the revenue generated by each gaming position located within a casino.

**New Orleans Gaming Performance** 

	V	TICH	ricans O	aming i c	HULIMAN	· ·			
	Casino			Ambient		Total			
	Positions	WPU	Revenue (\$M)	Machines	WPU	Revenue (\$M)	Positions	WPU	Revenue (\$M)
Orleans/Jefferson Parishes	6,125	\$313.72	\$701.37	2,828	\$100.59	\$103.84	8,953	\$246.40	805.21
percent of parishes	68.41%	127.32%	87.10%	31.59%	40.83%	12.90%	100.00%	100.00%	100.00%

Source: Louisiana Gaming Control Board

Overall there is no evidence that machines in either Louisiana or West Virginia have any impact on tourism. Although some tourists may chose to play the machines, and therefore some revenue is generated for the operators and the state, no tourists appear to be driven to these regions due to the presence of these ambient machines.

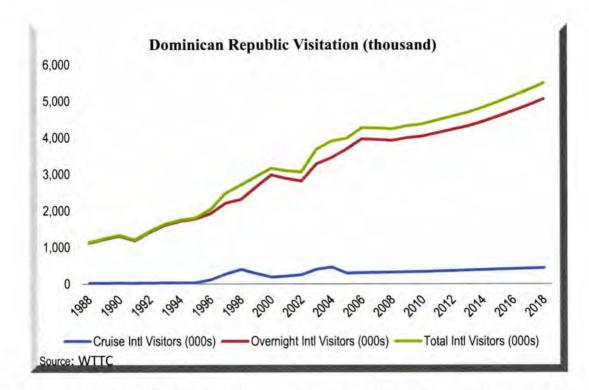
## APPENDIX

## Dominican Republic

The Dominican Republic's travel & tourism economy is ranked by the WTTC as number 68, out of 176, in absolute size worldwide and 41 in relative contribution to its national economy. Despite the strength of the Dominican Republic's travel and tourism economy, it is ranked as number 127 in potential long-term (10-year) growth.

The contribution of the Dominican Republic's travel and tourism economy to the gross domestic product is expected to decline from 16.6% (\$7,325.5 million) in 2008 to 16.4% (\$12,518.3 million) by 2018. Real GDP growth for the travel and tourism economy is expected to be 2.6% in 2008 and to grow at an A.A.G. of 3.7% over the coming 10 years. Export earnings from international visitors and tourism goods are expected to generate 35.6% of total exports, which estimated at \$4,436.6 million, in 2008, and increase to \$7,726.8 million, which is forecast to be a decreased percentage of 30.8% in 2018. The contribution of the travel and tourism economy to employment is expected to rise from 550,000 jobs in 2008, which is 14.4% of total employment or 1 in every 6.9 jobs, to 743,000 jobs by 2018, which would be 14.2% of total employment or 1 in every 7.1 jobs. In 2007, the Dominican Republic had the highest visitation among Caribbean destinations for stop-over arrivals, with just below 4.0 million tourists. Overall, overnight visitation to the Dominican Republic increased by 0.4%, with winter arrivals increasing by 1.4% and summer experiencing a 0.3% decline. The Dominican Republic is the fifth most visited Caribbean destination amongst tourists generated from the United States, the most frequented by the European market, and the second most visited Caribbean destination for Canadian travelers.

Visitation to the Dominican Republic is displayed in the following graph. As shown, overnight visitation has had consistent rapid growth. Cruise arrivals to the Dominican Republic makes up a small percent of total visitation to the island. Cruise visitation peaked in 2004 with 457,000 and is expected to reach that level again through 2018.



Between 1988 and 2007, cruise visitation to the Dominican Republic increased at an A.A.G. of 15.88% to reach approximately 310,000. Despite its impressive growth rate since 1988, cruise visitation makes up a very small percentage of the island's total visitation, accounting for only 7% in 2007. Overnight visitation to the Dominican Republic has grown at a 6.88% A.A.G. between 1988 and 2007, resulting in total visitation increasing at a 7.21% A.A.G. during this timeframe. From 2002 through 2007, the A.A.G. rate of cruise arrivals slowed down significantly to 4.65%, but overnight visitation increased to 7.04%, resulting in total visitation increasing at an A.A.G. of 6.85%. From 2008 through 2018, the WTTC forecasts that cruise arrivals to the Dominican Republic will increase at a 3.21% A.A.G., with overnight visitation rising at a 2.57% and overall visitation growing by a 2.62% A.A.G.

	Cruise International Visitors (000s)	Overnight International Visitors (000s)	Total Internationa Visitors (000s)
1988	19	1,116	1,135
1989	21	1,219	1,240
1990	22	1,305	1,327
1991	20	1,181	1,201
1992	24	1,415	1,439
1993	27	1,609	1,636
1994	29	1,717	1,746
1995	30	1,776	1,806
1996	111	1,926	2,037
1997	271	2,211	2,482
1998	393	2,309	2,702
1999	283	2,649	2,932
2000	183	2,978	3,161
2001	208	2,882	3,090
2002	247	2,811	3,058
2003	398	3,282	3,680
2004	457	3450	3907
2005	290	3691	3981
2006	303	3965	4268
2007	310	3,949	4,259
2008	315	3,923	4,238
2009	325	3,998	4,323
2010	332	4,040	4,372
2011	345	4,132	4,477
2012	358	4,224	4,582
2013	371	4,314	4,685
2014	384	4,438	4,822
2015	396	4,580	4,976
2016	409	4,730	5,139
2017	421	4,888	5,308
2018	433	5,055	5,488
A.A.G. '88-'07	15.88%	6.88%	7.21%
A.A.G. '02-'07	4.65%	7.04%	6.85%
A.A.G. '08-'18	3.21%	2.57%	2.62%

Source: WTTC

## Cuba

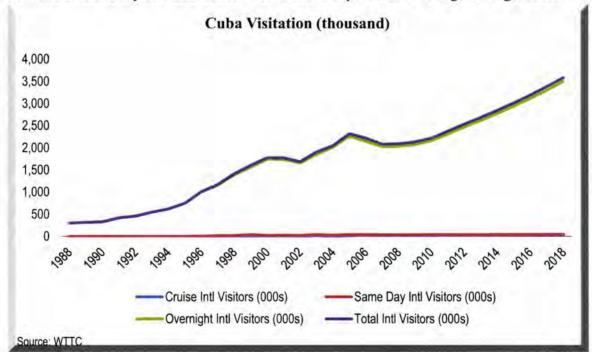
The Cuba travel and tourism economy is ranked number 80 in absolute size worldwide and number 72 out of 176 countries estimated by the WTTC. The long-term growth potential of Cuba over the next ten years is ranked as 168 by the WTTC.

The contribution of Cuba's travel and tourism economy to GDP is expected to rise from 10.9% or \$3,371.0 million in 2008 to 12.2% or \$5,966.7 million by 2018. Real GDP growth for the travel and tourism economy is expected to be 1.6% in 2008 and to increase at a 2.6% A.A.G. through 2018. Export earnings from international visitors and tourism

goods are expected to generate 30.9% of total Cuba's exports in 2008, which would be \$2,687.7 million, and grow to 30.7% in 2018, which is forecast to be equal to \$4,571.8 million. The contribution of the travel & tourism economy to employment is expected to rise from 489,000 jobs in 2008, 9.3% of total employment or 1 in every 10.7 jobs to 562,000 jobs, which is forecast to be 10.5% of total employment or 1 in every 9.5 jobs by 2018.

Cuba received the second highest visitation from stop over tourists amongst Caribbean destinations in 2007, with below 2.2 million visitors. Overnight visitation to Cuba decreased in 2007, declining by 3.1%. Cuba's winter arrivals experienced significant decline, dropping by 8.3%, and their summer arrivals increased by 1.0%. Despite the United States being the top generating market to most Caribbean destinations, Cuba has shown consistently high visitation figures with very few visits from the United States, as a result of a trade embargo. Cuba is the top Caribbean destination for Canadian visitors and the second most frequented by European tourists, surpassed only by the Dominican Republic.

The following graph shows the actual and forecasted visitation to Cuba from 1988 through 2018. As displayed, Cuba's overnight arrivals account for 97% or more of total visitation. In 2006 and 2007, total visitation declined, but the WTTC forecasts that arrivals will increase in 2008. Cruise visitation and same-day arrivals have historically remained consistently low and the WTTC does not expect this to change through 2018.



Cuba's visitation is displayed in the following table. Between 1988 and 2007, cruise arrivals increased at an A.A.G. or 23.13%, rising from 400 tourists to 210,000. Day visitation increased from 810 tourists in 1988 to 36,900 in 2007, which was an A.A.G. of 22.29%. Overnight arrivals grew at an A.A.G. of 10.60% from 1988 to 2007, to account

for nearly 2.03 million tourists. Overall visitation increased at a 10.74% A.A.G. between 1988 and 2007, which decreased to an A.A.G. of 4.33% for the period between 2002 and 2007. From 2002 through 2007, overnight visitation increased at an A.A.G. of 4.12%, with day tourists growing at an 8.98% A.A.G. and cruise visitation increasing at an A.A.G. of 28.47%. The WTTC forecasts that cruise arrivals will increase at a 5.80% A.A.G. between 2008 and 2018, with day visitors increasing by a 2.00% A.A.G., and overnight visitation increasing at a 5.59% A.A.G. Overall visitation is expected to amount to almost 3.6 million tourists in 2018, which is an A.A.G. of 5.54% from 2008.

Cuba Visitation							
	Cruise International Visitors (000s)	Same Day International Visitors (000s)	Overnight International Visitors (000s)	Total Internationa Visitors (000s)			
1988	0.40	0.81	299.00	300.21			
1989	0.42	0.85	315.00	316.27			
1990	0.44	0.88	327.00	328.32			
1991	0.56	1.13	418.00	419.69			
1992	0.61	1.23	455.00	456.84			
1993	0.73	1.47	544.00	546.20			
1994	0.83	1.66	617.00	619.50			
1995	1.00	2.00	742.00	745.00			
1996	2.00	3.00	999.00	1,004.00			
1997	2.00	15.00	1,153.00	1,170.00			
1998	8.00	18.00	1,390.00	1,416.00			
1999	4.00	38.00	1,561.00	1,603.00			
2000	10.00	23.00	1,741.00	1,774.00			
2001	14.00	25.00	1,736.00	1,775.00			
2002	6.00	24.00	1,656.00	1,686.00			
2003	20.00	39.00	1,847.00	1,906.00			
2004	5.00	27.00	2,017.00	2,049.00			
2005	17.00	41.00	2,261.00	2,319.00			
2006	30.00	41.00	2,150.00	2,221.00			
2007	21.00	36.90	2,026.15	2,084.05			
2008	21.63	37.64	2,033.16	2,092.43			
2009	22.50	38.39	2,073.82	2,134.71			
2010	23.84	39.16	2,156.77	2,219.78			
2011	25.28	39.94	2,307.75	2,372.97			
2012	26.79	40.74	2,469.29	2,536.82			
2013	28.40	41.56	2,617.45	2,687.40			
2014	30.10	42.39	2,774.50	2,846.99			
2015	31.91	43.23	2,940.96	3,016.11			
2016	33.82	44.10	3,117.42	3,195.34			
2017	35.85	44.98	3,304.47	3,385.30			
2018	38.01	45.88	3,502.73	3,586.62			
A.A.G. '88-'07	23.13%	22.29%	10.60%	10.74%			
A.A.G. '02-'07	28.47%	8.98%	4.12%	4.33%			
A.A.G. '08-'18	5.80%	2.00%	5.59%	5.54%			

Source: WTTC

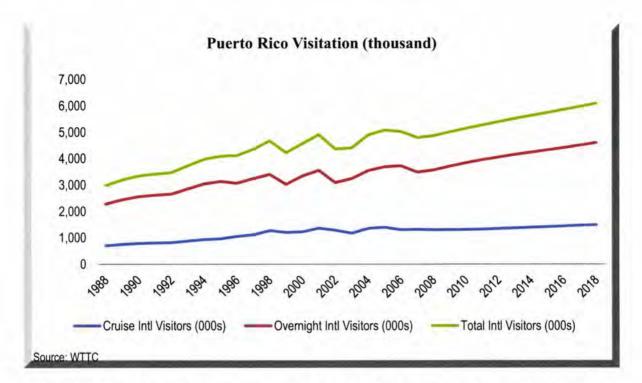
# Puerto Rico

The Puerto Rico travel & tourism economy is ranked by the WTTC as number 64 in absolute size worldwide and number 152 in relative contribution to national economies. Out of 176 countries, Puerto Rico is ranked 170 in long-term (10-year) growth.

The contribution of Puerto Rico's travel and tourism economy to the GDP is expected to decline from 5.6% (\$5,633.9 million) in 2008 to 5.4% (\$10,196.8 million) in 2018. Real GDP growth for Puerto Rico's travel and tourism economy is expected to decline 0.9% in 2008 and to increase at a 2.0% A.A.G. over the coming 10 years. Export earnings from international visitors and tourism goods are expected to generate 7.7% of total exports (US\$5,745.6 million) in 2008, decreasing to 7.0% (\$10,556.4 million) in 2018. The contribution of the travel and tourism economy to total employment is expected to fall from 5.8% of total employment (77,000 jobs) in 2008, which is estimated at or 1 in every 17.2 jobs, to 5.6% (84,000 jobs) in 2018, which would be 1 in every 18.0 jobs.

Amongst Caribbean destinations, Puerto Rico received the fifth most stay-over visitors in 2007, with nearly 1.4 million, which was down 5.9% compared to 2006. Both winter and summer overnight visitation to Puerto Rico declined in 2007, dropping by 8.0% and 4.4%, respectively. Puerto Rico is the third most visited Caribbean destination amongst US tourists, behind Cancun and the Bahamas. Visitation to Puerto Rico from the United States is enhanced by its protectorate status and subsequent Puerto Rican population residing in the United States and subsequent visitation between family and friends.

The following graph displays Puerto Rico's visitation from 1988 to 2007, with the WTTC's forecasts through 2018. Historically, cruise visitation has accounted for approximately 25% of total arrivals and that percentage is not expected to show any significant growth. As shown, overall cruise visitation is expected to increase very gradually between 2008 and 2018, with overnight arrivals forecast to increase more rapidly between 2008 and 2018. Despite significant decreases in 1999, 2002, and 2007, total visitation has consistently shown steady, gradual increases. Following the years of declining visitation, Puerto Rico was able to rebound and show positive increases in total tourist counts.



Cruise arrivals to Puerto Rico increased at a 3.37% A.A.G. between 1988 and 2007, with overnight visitation rising at a 2.26% A.A.G. and overall visitors growing by a 2.54% A.A.G. From 2002 through 2007, Puerto Rico's cruise arrivals decreased at an A.A.G. of 0.50%, while overnight visitation increased 2.46%. Total visitation to Puerto Rico grew from below 4.4 million in 2002 at an A.A.G. of 1.9% to slightly less than 4.8 million in 2007. From 2008 through 2018, the WTTC forecasts that cruise arrivals will increase at a 1.39% A.A.G. and overnight visitors growing at a 2.59% A.A.G., resulting in overall tourism growth of 2.28% A.A.G. The following table displays these statistics for Puerto Rico.

	Puerto Rico Visitation					
	Cruise International Visitors (000s)	Overnight International Visitors (000s)	Total International Visitors (000s)			
1988	696.47	2,281.00	2,977.47			
1989	746.24	2,444.00	3,190.24			
1990	781.65	2,560.00	3,341.66			
1991	797.84	2,613.00	3,410.84			
1992	811.27	2,657.00	3,468.27			
1993	871.42	2,854.00	3,725.42			
1994	928.83	3,042.00	3,970.82			
1995	956.00	3,131.00	4,087.00			
1996	1,045.00	3,065.00	4,110.00			
1997	1,106.00	3,242.00	4,350.00			
1998	1,266.00	3,396.00	4,671.00			
1999	1,196.00	3,024.00	4,221.00			
2000	1,221.00	3,341.00	4,566.00			
2001	1,357.00	3,551.00	4,908.00			
2002	1,276.00	3,087.00	4,364.00			
2003	1,164.00	3,238.00	4,402.00			
2004	1,348.00	3,541.00	4,889.00			
2005	1,387.00	3,686.00	5,073.00			
2006	1,300.00	3,722.00	5,022.00			
2007	1,308.29	3,485.24	4,793.53			
2008	1,296.55	3,564.20	4,860.75			
2009	1,298.61	3,706.76	5,005.38			
2010	1,304.16	3,836.50	5,140.66			
2011	1,316.94	3,951.59	5,268.53			
2012	1,339.77	4,050.38	5,390.16			
2013	1,363.09	4,151.64	5,514.73			
2014	1,386.99	4,235.08	5,622.08			
2015	1,411.59	4,322.30	5,733.88			
2016	1,436.59	4,412.48	5,849.08			
2017	1,462.17	4,505.98	5,968.15			
2018	1,487.99	4,601.67	6,089.66			
A.A.G. '88-'07	3.37%	2.26%	2.54%			
A.A.G. '02-'07	0.50%	2.46%	1.90%			
A.A.G. '08-'18	1.39%	2.59%	2.28%			

Source: WTTC

## Jamaica

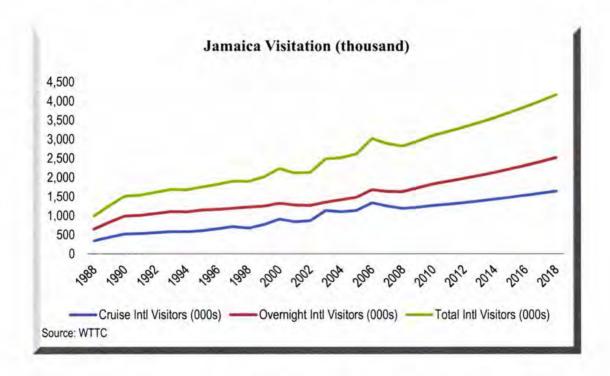
The Jamaica travel and tourism economy is ranked number 89 in absolute size worldwide and number 16 in relative contribution to national economies. The WTTC also ranks Jamaica as number 121 in long-term (10-year) growth.

The contribution of Jamaica's travel and tourism economy to GDP is expected to rise from 30.8% (\$3,415.3 million) in 2008 to 36.2% (\$6,145.5 million) by 2018. Real GDP growth for the travel and tourism economy is expected to decrease by 0.2% in 2008 and to have a 3.7% A.A.G. over the coming 10 years. Export earnings from international visitors and tourism goods are expected to generate 35.2% of total exports (\$2,184.6)

million) in 2008, and decrease to 32.8% (\$4,728.0 million) in 2018. The contribution of Jamaica's travel and tourism economy to employment is expected to rise from 290,000 jobs in 2008, which is estimated to be 27.1% of total employment or 1 in every 3.7 jobs to 385,000 jobs, which is forecast to be 32.1% of total employment or 1 in every 3.1 jobs in 2018.

Jamaica received 1.6 million overnight visitors in 2007, the fourth most among Caribbean destinations. Total overnight visitation increased by 1.3% in 2007, with summer arrivals increasing 4.1% and winter tourists decreasing 3.7%. The United States is Jamaica's largest source market, generating over 1.1 million visitors in 2007. Jamaica is the third most visited Caribbean destination amongst European travelers, which accounted for 288,894 visits in 2007.

The following chart displays Jamaica's visitation from 1988 through 2007 and forecast from 2008 to 2018. As shown, cruise arrivals and overnight visitation have grown at fairly consistent levels and this relationship is expected to continue.



The following table displays Jamaica's visitation figures. As shown, cruise visitation increased at a 7.05% A.A.G. between 1988 and 2007, while overnight arrivals grew by 4.98%, resulting in an overall 5.78% A.A.G. From 2002 through 2007, Jamaica's cruise arrivals increased at a 7.64% A.A.G. and overnight visitors grew at a 5.24% A.A.G. In 2002, approximately 2.13 million tourists visited Jamaica, which increased to over 2.88 million in 2007, representing an A.A.G. of 6.24%. The WTTC forecasts a 3.30% A.A.G. in cruise arrivals between 2008 and 2018 and overnight visitors rising by a 4.45% A.A.G. The WTTC expects Jamaica to host over 4.16 million tourists in 2018, representing a 3.98% A.A.G. since 2008.

	Cruise International Visitors (000s)	Overnight International Visitors (000s)	Total Internationa Visitors (000s)
1988	342	649	991
1989	437	829	1,266
1990	522	989	1,511
1991	531	1,007	1,538
1992	558	1,057	1,615
1993	583	1,105	1,688
1994	579	1,098	1,677
1995	605	1,147	1,752
1996	658	1,162	1,821
1997	712	1,192	1,904
1998	674	1,225	1,899
1999	764	1,248	2,013
2000	908	1,323	2,230
2001	840	1,277	2,117
2002	865	1,266	2,131
2003	1,133	1,350	2,483
2004	1,100	1,415	2,515
2005	1,136	1,479	2,615
2006	1,336	1,679	3,015
2007	1,250	1,634	2,884
2008	1,188	1,630	2,818
2009	1,222	1,734	2,956
2010	1,267	1,833	3,100
2011	1,299	1,903	3,201
2012	1,339	1,976	3,315
2013	1,384	2,050	3,434
2014	1,433	2,133	3,565
2015	1,482	2,221	3,704
2016	1,534	2,315	3,849
2017	1,588	2,415	4,004
2018	1,644	2,520	4,164
A.A.G. '88-'07	7.05%	4.98%	5.78%
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A.A.G. '08-'18 Source: WTTC

A.A.G. '02-'07

## Bahamas

The Bahamas travel and tourism economy is ranked number 88 in absolute size worldwide and number 7 in relative contribution to national economies. The WTTC also ranks the Bahamas as 163 in long-term (10-year) growth

5.24%

4.45%

6.24%

3.98%

7.64%

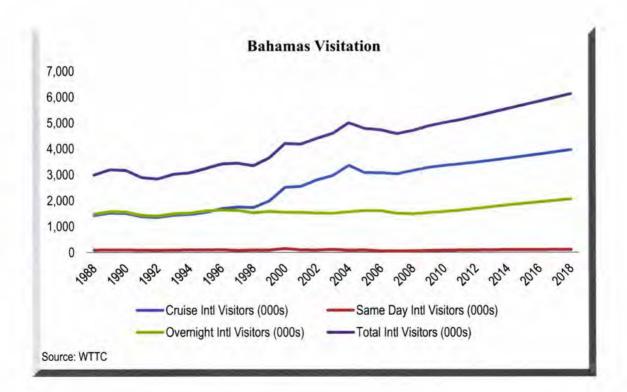
3.30%

The contribution of travel and tourism economy to the Bahamas' GDP is expected to rise from 50.8% (\$3,528.3 million) in 2008 to 51.6% (\$5,907.7 million) by 2018. Real GDP growth for the Bahamas travel and tourism economy is expected to be 3.5% in 2008 and to increase at a 2.7% A.A.G. over the coming 10 years. Export earnings from

international visitors and tourism goods are expected to generate 60.4% of total exports (\$2,212.0 million) in 2008, and increase to 57.8% (\$3,826.9 million) of the forecasted total in 2018. The contribution of the Bahamas travel and tourism industry to employment is expected to rise from 95,000 jobs in 2008, which is estimated at 63.5% of total employment or 1 in every 1.6 jobs to 120,000 jobs in 2018, which is forecast to be 65.0% of total employment or 1 in every 1.5 jobs.

The Bahamas received the fifth most overnight tourists to the Caribbean in 2007. With over 1.5 million overnight tourists, visitation was down 4.6%, which was a result of winter arrivals decreasing by 7.0% and summer experiencing 3.1% drop. The Bahamas is the second most visited Caribbean destination by US visitors, preceded only by Cancun.

The following chart displays visitation trends to the Bahamas. As shown, cruise and overnight visitors had consistent results until 1996, when cruise visitors began to exceed air arrivals. Since 1996, total visitation has growth at approximately the same rate as cruise visitation. Same-day visitation and overnight visitation have remained very consistent since 1988. The WTTC forecasts that overnight stays will begin to gradually increase in 2010.



The following table displays the Bahamas' actual and forecasted visitation figures. As shown, from 1988 through 2007, cruise arrivals increased at a 4.06% A.A.G., while same-day visitation decreased by 3.02%, and overnight guests increased by a 0.09% A.A.G. Total tourists arrivals grew at a 2.27% A.A.G. between 1988 and 2007. From 2002 through 2007, cruise arrivals grew at a 1.59% A.A.G. to amount to over 3.03 million passengers. Same day visitation has declined by 11.12% between 2002 and 2007 and overnight visitation decreased by 0.17% A.A.G. to account for 1.5 million arrivals. In total, visitation to the Bahamas has increased at a 0.79% A.A.G. from 2002 through 2007, with over 4.58 total tourists. The WTTC forecasts cruise visitation to increase at a 2.30% A.A.G. between 2008 and 2018. Same-day arrivals are projected to increase over the next ten years by a 6.64% A.A.G. and overnight visitors are forecasted to grow at a 3.30% A.A.G. Total visitation to the Bahamas is expected to equal over 6.13 million tourists in 2018, which is a 2.69% A.A.G. compared to 2008.

	Cruise International Visitors (000s)	Same Day International Visitors (000s)	Overnight International Visitors (000s)	Total Internationa Visitors (000s)
1988	1,424	90	1,475	2,990
1989	1,521	97	1,575	3,192
1990	1,508	96	1,562	3,166
1991	1,378	88	1,427	2,892
1992	1,351	86	1,399	2,836
1993	1,438	91	1,489	3,018
1994	1,464	93	1,516	3,073
1995	1,543	97	1,598	3,239
1996	1,686	99	1,633	3,416
1997	1,751	77	1,618	3,446
1998	1,730	90	1,528	3,348
1999	1,981	90	1,577	3,648
2000	2,513	147	1,544	4,204
2001	2,552	93	1,538	4,183
2002	2,802	91	1,513	4,406
2003	2,970	114	1,510	4,594
2004	3,360	83	1,561	5,004
2005	3,079	92	1,608	4,779
2006	3,076	54	1,600	4,731
2007	3,032	50	1,500	4,583
2008	3,161	58	1,485	4,703
2009	3,282	71	1,530	4,883
2010	3,356	80	1,575	5,011
2011	3,414	87	1,624	5,125
2012	3,482	92	1,687	5,261
2013	3,555	96	1,759	5,409
2014	3,631	99	1,823	5,553
2015	3,711	102	1,883	5,696
2016	3,794	105	1,941	5,839
2017	3,879	107	1,998	5,984
2018	3,966	110	2,055	6,131

A.A.G. '88-'07	4.06%	-3.02%	0.09%	2.27%
A.A.G. '02-'07	1.59%	-11.12%	-0.17%	0.79%
A.A.G. '08-'18	2.30%	6.64%	3.30%	2.69%

Source: WTTC

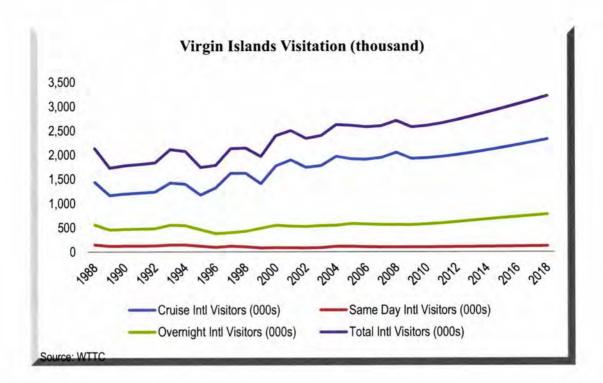
## Virgin Islands

The US Virgin Islands Travel & Tourism economy is ranked number 103 in absolute size worldwide and number 11 in relative contribution to national economies. Out of 176 countries, the Virgin Islands are ranked as number 174 in long-term (10-year) growth.

The contribution of the travel and tourism economy to GDP is expected to rise from 38.4% (\$1,316.4 million) in 2008 to 39.4% (\$2,303.6 million) by 2018. Real GDP growth for the travel and tourism economy is expected to be 3.2% in 2008 and to grow at a 3.3% A.A.G. over the coming 10 years. Export earnings from international visitors and tourism goods are expected to generate 11.9% of total exports (\$2,025.4 million) in 2008, which is expected to increase to 19.6% (\$3,083.0 million) in 2018. The contribution of the travel and tourism economy to employment is expected to rise from 23,000 jobs in 2008, which is 46.1% of total employment or 1 in every 2.2 jobs, to 28,000 jobs in 2018, which is forecast to be 49.2% of total employment or 1 in every 2.0 jobs.

The U.S. Virgin Islands had the eighth most overnight arrivals in 2007, amongst Caribbean destinations, experiencing a 3.3% increase over 2006 figures. Overnight visitation to the Virgin Islands decreased in the winter by 5.1%, but had a strong showing during the summer with a 9.3% increase. The Virgin Islands was the sixth most visited Caribbean destination for US tourists in 2007.

The following graph displays historical visitation to the Virgin Islands and the WTTC's forecasts from 2008 through 2018. As shown, total visitation moves in-step with cruise arrivals, a result of same-day and overnight visitors staying rather consistent.



Cruise visitation to the Virgin Islands experienced a 1.60% A.A.G. from 1988 through 2007 while same-day visitors declined by 1.99% during the same period. Overnight tourism increased by a 0.04% A.A.G. between 1988 and 2007, while total visitation increased at a 1.04% A.A.G. From 2002 through 2007, same day visitation grew at an A.A.G. of 4.45%. In 2002, cruise arrivals accounted for nearly 1.74 million visitors, and in 2007 that figure increased to 1.94 million, representing an A.A.G. of 2.21%. Total visitation increased to nearly 2.60 million tourists in 2007, a 2.13% A.A.G. when compared to 2002's 2.34 million arrivals. The WTTC forecasts cruise visitation increasing at a 1.25% A.A.G. from 2008 through 2018 and overnight arrivals are projected to increase by 3.32%. Total visitation is forecasted to be less than 3.22 million in 2018, which is a 1.74% increase over 2018. The following table displays these statistics.

	A	C	O	
	Cruise Intl Visitors (000s)	Same Day Intl Visitors (000s)	Overnight Intl Visitors (000s)	Total Int Visitors (000s)
1988	1,434	142	556	2,132
1989	1,161	115	450	1,726
1990	1,194	118	463	1,776
1991	1,212	120	470	1,802
1992	1,233	122	478	1,833
1993	1,419	141	550	2,109
1994	1,393	138	540	2,071
1995	1,171	116	454	1,741
1996	1,316	90	373	1,779
1997	1,619	116	393	2,128
1998	1,616	101	422	2,139
1999	1,404	77	484	1,964
2000	1,768	82	546	2,396
2001	1,891	79	527	2,497
2002	1,739	78	520	2,337
2003	1,774	83	538	2,395
2004	1,965	111	544	2,620
2005	1,913	110	582	2,605
2006	1,904	101	570	2,575
2007	1,940	97	560	2,597
2008	2,050	96	558	2,704
2009	1,921	95	557	2,573
2010	1,934	97	572	2,603
2011	1,961	99	592	2,652
2012	1,999	102	618	2,719
2013	2,044	104	647	2,795
2014	2,094	107	673	2,874
2015	2,147	110	699	2,956
2016	2,203	113	724	3,039
2017	2,262	116	749	3,126
2018	2,322	119	774	3,215
A.A.G. '88-'07	1.60%	-1.99%	0.04%	1.04%
A.A.G. '02-'07	2.21%	4.45%	1.49%	2.13%

2.20%

3.32%

1.74%

1.25%

A.A.G. '08-'18

Source: WTTC

# Section VI: Social Impact of Expanded Gaming in Bermuda

## INTRODUCTION

Gaming has experienced a rapid growth in recent years as jurisdictions around the world have looked to gaming as a source of revenue to governments and a source of economic development for the communities in which they operate. Concurrent with gaming's growth has been an increase in scientific inquiry on the social impact of new gaming ventures.

With the anticipated introduction of legalized gambling in Bermuda, the Bermuda Government and Bermuda Hotel Association has asked The Innovation Group not only to examine how the country could possibly benefit from various forms of gaming, but also to analyze how problems, traditionally thought to be associated with gaming, can be mitigated.

This report begins with a discussion on the relationship between crime and casino, followed by a discussion of problem and pathological gamblers, to better understand who they are, how they are identified, etc. Within this section we discuss prevalence studies which estimate the percentage of a population who are problem or pathological gamblers and include results of prevalence rates found throughout the world. The report then discusses the social impacts of casinos and problem gambling as they relate to the community, including discussions on issues such as bankruptcy, suicide, and family impact issues of child abuse/neglect, substance abuse, comorbidity, divorce, domestic violence and homelessness. Following the aforementioned sections is a discussion on social impact initiatives to combat the potential negative impacts that legalized gaming may bring upon a community. We also discuss the potential impact on local business in and around the proposed casino community. Finally we present information relating to the costs of regulating casinos.

It is important to note that other jurisdictions have faced similar issues. The Australia Government Productivity Commission, for example, explained: "The challenge for all governments ... is to find a response which balances the undoubted right of individuals to gamble if they wish with the ongoing responsibility of governments for overall community welfare.<sup>13</sup>

To better understand how governments can approach regulating new types of gaming and minimize resulting problems, two federally funded studies have been conducted in the US. At the time of the first study in 1976, there was relatively limited legal gambling in the country as only 13 states in the US had lotteries and only one had casinos. By the

<sup>13</sup> Australia Productivity Commission.

authorization of the second study in 1996, many states had authorized lotteries and/or casinos or had entered into compacts with tribal governments for expanded gaming.

The work of the 1996 National Gambling Impact Study Commission included research contracts to the National Opinion Research Center at the University of Chicago and the National Research Council of the National Academy of Sciences to study the social impact of gambling and the prevalence or problematic gambling behavior. These studies will be referenced throughout the report.

Since that time additional statistics anectodal data and other information has become available in terms of the economic and social impacts that the industry has on a jurisdiction.

## REVIEW OF THE RESEARCH

In assessing the issue of casinos and crime, we have examined the following:

- First, a broad examination of national studies and key methodological debates.
- Secondly, a review of secondary research and qualitative studies at the local level.
- Finally, primary research conducted by the Innovation Group of neighborhoodlevel impacts.

# National Studies and Methodology Discussion

A number of broad studies of the social and economic impact of casinos have been conducted in the United States. In the late 1990s, prompted by the expansion of casinos throughout the United States, mainly in the form of riverboat casinos, Native American casinos, and racetrack slot parlors, Congress set up the National Gambling Impact Study Commission (NGISC). Its findings were released in 1999.

The Commission retained the National Research Council (NRC) to review the existing research on the socio-economic impacts of casino development. The NRC concluded that the existing research on the subject was inadequate:

The NRC project involved a review of all existing and relevant studies by representatives of a variety of scientific fields. In the end, NRC recommended that further study be initiated. Study of the benefits and costs of gambling "is still in its infancy." Lamenting past studies that utilized "methods so inadequate as to invalidate their conclusions," the absence of "systematic data," the substitution of "assumptions for the missing data," the lack of testing of assumptions, "haphazard" applications of estimations in one study by another, the lack of clear identification of the costs and benefits to be studied, and many other problems, NRC concluded the situation demands a "need for more objective and extensive analysis of the economic impact that gambling has on the economy." 14

The Commission then retained the National Opinion Research Center (NORC) to undertake said "objective and extensive analysis" concerning crime impacts. The NORC came to the following conclusion:

First, the casino effect is not statistically significant for any of the bankruptcy or crime outcome measures....... This is not to say that there is no casino-related crime or the like; rather, these effects are either small enough as not to be noticeable in the general wash of the statistics, or whatever problems that are created along these lines when a casino is built may be countered by other effects. <sup>15</sup>

Despite the Commission's authoritative findings, some researchers continue to claim that casinos cause crime. However, there appear to be three major flaws in much of the research supporting this conclusion:

1. Much of the research that attributes an increase in crime to casinos has ignored the temporary population increases brought about by casino visitation. When

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<sup>&</sup>lt;sup>14</sup> National Gambling Impact Study, Chapter 7. 1999. Gambling's Impact on People and Places.

<sup>&</sup>lt;sup>15</sup> The National Gambling Impact Study Commission, "National Gambling Impact Study" (1999).

- crime rates are calculated not accounting for the influx of visitors, there appears to be an increase in crime. While this may be true in absolute terms, it radically overestimates the increase in likelihood of a residents being victims of crime.
- Further to #1, some research applies crimes such as on-site thefts of casino visitors to the local population, leading to an invalid increase in the local crime rate.
- The crimes rates are not studied over a sufficient period of time and therefore temporary increases or long term trends attributable to more primary causal factors are not always recognized or are misinterpreted.

One of the earliest examples of flawed research related to Atlantic City. The *number* of crimes tripled after casinos opened in 1978, and some researchers applied the increase to the local resident population, which in the resulting invalid calculation resulted in a tripling of the crime *rate*. However, most of the increase related to thefts from visitors within the casinos, which did not impact the local population. A valid calculation of the crime rate has to include the visitation base. In Atlantic City's case, the number of visitors grew significantly after the introduction of gaming.

Some early researchers realized the importance of accounting for visitor influx. In 1998 Douglas Seay reported on the crime figures for Atlantic City before and after the casino openings.

When the gross numbers of crimes (based on the FBI's Uniform Crime Report Index [UCR]) in Atlantic City before and after the opening the first casinos in 1978 are compared, there is little dispute that there was an immediate and substantial increase in virtually all categories of crime.

.... There may be more crime, but it may be entirely commensurate with the larger tourist-padded population base, with the net impact on individuals being more or less benign. 16

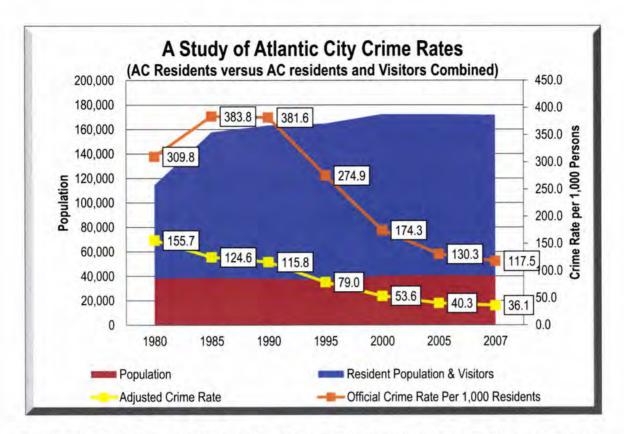
As gaming in Atlantic City expanded and matured during the past two decades, the crime rate continued to decline. Factors likely included an increase in casino employment and law enforcement resources, safer infrastructure with well-lit garages, and an increase in general tourism activity. According to the latest available annual data, this decline in crime rates per 1,000 residents continued through 2007 to a rate of 36.1 per thousand residents. The chart on the following page illustrates crime rate trends since 1980. <sup>17</sup>

In actuality, therefore, there has been a *decreased* chance of being a victim of crime since casinos were developed in Atlantic City.

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<sup>&</sup>lt;sup>16</sup> Seay, D. (1998). Gambling and crime. National Gambling Impact Study Commission.

<sup>&</sup>lt;sup>17</sup> Margolis, J. & Altheimer & Gray. (December 1997). Casinos and crime: An analysis of the evidence. American Gaming Association. http://www.americangaming.org/assets/files/studies/Crime.pdf



Separately, The Rappaport Institute for Greater Boston and the John F. Kennedy School of Economics at Harvard University (Baxandall and Sacerdote 2005) in a national, county-level study of Native American casinos found a slight decrease in crime rates after casinos opened. In the total sample group of 156 counties, the Rappaport study found a decrease of 3 reported crimes per 1,000 residents.

Two studies performed in the last decade purported to show a correlation between crime and casinos. In a statistical analysis of all U.S. counties, Grinols and Mustard (2000; updated 2004) estimated that a statistically significant proportion of violent and property crimes in casino counties could be attributed to casinos. In a study of Native American casinos, the National Bureau of Economic Research (NBER) found a measurably smaller increase. Unlike the NBER study, the Grinols study did not control for upward trends statewide, and thus came up with a higher estimate (i.e. crime was rising in the area at large, and not specifically at the casinos).

In sorting out the discrepancy between the Rappaport study and the Grinols/NBER, one critical difference in methodology is at work: the Rappaport study looked at what happens on the casino premises versus within the local community, whereas Grinols and NBER do not distinguish between on-site and off-site crimes.

For instance, the Rappaport study looked at crime trends in Ledyard, Connecticut (which hosts the Foxwoods casino) from 1991 to 1998. They found that crimes outside the casino increased from 214 in 1991 to 364 in 1998. In subsequent years, State Police data show that off-casino crimes in Ledyard fell below pre-casino levels. As with Ledyard,

the number of crimes reported in Montville "remained relatively constant," which the authors conclude is "surprising since the sheer increase in activity around these towns might have led to greater crime." <sup>18</sup>

Furthermore, Grinols and NBER use "undiluted" crime rates. In other words, casino visitors are not included in the base population, which inflates the crime rate relative to the local population, similar to the issues noted previously with some of the initial Atlantic City studies. In the Ledyard experience, for example, there were approximately 1,000 crimes committed on the premises (mostly minor thefts, traffic violations, DUI and disorderly conduct related crimes) of the casino by an estimated 6-8 million visitors to the casino (minus crimes committed by employees). Applying those crimes to the local resident population only would of course result in an alarming increase in crime rates.

Baxandall and Sacerdote responded directly to the NBER study and the use of undiluted rates in the following statement:

Our analysis shows that while total crime can be expected to increase when casinos open, the increase is due to increased population, not to a casino-created crime wave. Looking at FBI indexed crimes per resident in all [156] counties; we find that introducing a casino is associated with a decrease of 3 reported crimes per 1,000 people. The introduction of a casino, however, had no statistically significant effect on per-capita crime rates in either large-population casino counties or in large-casino counties. The per-capita crime rate in the 9 large-population counties that also hosted large-capacity casinos dropped 6 crimes per 1,000 residents, however. <sup>19</sup>

From their total sample of 156 casino counties, the Rappaport study isolated out 57 counties with large casinos and relatively low population and nine counties with both large casinos and large populations to see if there were statistical differences in terms of community impacts. The following table shows their results:

Rap	paport	Study	Results
****	Dat DOL	Deuty	Trender

	All Casino- Counties	Large -Capacity Casino Counties	Populous Casino Counties
Population growth (%)	+5*	8.6	+8.1*
Total employment (%)	+6.7*	+14.9*	5.7
Unemployment (%)	-0.3	-1.2*	0.5
House prices	\$5,869	\$8,924	\$7,083
Crime (per 1,000 people)	-3	-6	-1

Statistically significant results are in bold (95% confidence interval). Asterix denotes higher levels of statistical significance (99% confidence).

#### Baxandall and Sacerdote conclude that:

In sum, casinos are not associated with general increases in crime rates. The total number of crimes can be expected to increase with the introduction of casinos, but only because casinos are associated with population increases which are far larger than any possible decrease in the number of crimes per resident.

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<sup>&</sup>lt;sup>18</sup> Baxandall, P. & B. Sacerdote (January 2005). *The Casino Gamble in Massachusetts: Full Report and Appendices.* Rappaport Institute for Greater Boston, John F. Kennedy School of Economics, Harvard University. Page 14.

<sup>&</sup>lt;sup>19</sup> IBID. As summarized in their 2008 report, "Betting on the Future: The Economic Impact of Legalized Gambling."

Grinols acknowledges that casinos can reduce crime in the first two years by increasing employment, which thus would cause a decline in the population of individuals who might be financially motivated to commit crime. In addition, increases in police services as a result of casino funding temporarily depress crime. He claims, however, that by year three or four, the impact of problem gambling begins to take effect, and that crime begins to rise as problem gamblers run out of assets or credit and turn to stealing to support their addiction (i.e. "time lag" or "intertemporal" shifts in crime impacts). As we discuss in a later section, however, the impact of problem gaming on crime rates and bankruptcies is also highly contentious and is not as prevalent as some argue.

In summary, there is no evidence from this gross level data that the advent of the introduction of casino gaming has a measurable impact on jurisdiction-wide crime rates in general. It is highly likely that any crimes associated with casinos are either offset by the economic benefits brought by casinos or the level of crime is so small as to be overwhelmed by other more significant factors such as the economy.

From this series of date that is available, it can be concluded that while the number of crimes reported on-site at casinos in Bermuda may likely increase, overall crime rates will likely decline when additional visitation attributable to the introduction of gaming is accounted for. In addition, in the following section we discuss the types of crimes that traditionally have occurred in a gaming environment. Furthermore, the number of crimes in the surrounding area is unlikely to increase, or may even decrease as a result of increased employment and law enforcement presence.

## CRIMES IN A CASINO ENVIRONMENT

### Introduction

While it appears from the supporting data that most major crimes at a local level are unaffected in a measurable way, by the advent of casinos there is the potential that crime in the immediate neighborhood where the casino is located could be affected. This situation is based on the fact that if there is a substantial increase in suitable targets, targets that in all likelihood are carrying cash, then there is the possibility that criminal elements will focus on this area. However there is another consideration. Knowing this relationship, deterrents can be also focused on this area to reduce and prevent crime. In the case of casinos, deterrents come in two forms, the casino security and surveillance, responsible for onsite security and crime prevention, and the local police force responsible for patrolling the surrounding streets and neighborhoods.

Casinos are acutely aware that criminal elements view their properties as target rich areas and therefore they expend a considerable amount of resources in providing adequate security to deter on site crimes. This situation is not only driven by responsibility to their patrons but also from a profit perspective. In a survey conducted for the Philadelphia Gaming Advisory Task force (PGATF) in 2005 as part of a study directed by The Innovation Group, safety and security perceptions of the casino site played a paramount role in the process of deciding which casino to visit. In addition, in other research completed by The Innovation Group, including our nationwide survey of casino gamers titles *Portrait of American Gamblers*, security and safety is often cited as an important consideration for gamblers. In many cities casinos provide direct funding support to local police forces to provide additional police patrols in the neighborhood of the casino. With the presence of these deterrents criminals find this target rich environment fraught with problems in the realization of their criminal goals. The Innovation Group recommends that should Bermuda move forward on legislation allowing for casino gaming that this concept of providing deterrents be considered.

In summary, it appears from the limited data available and from anecdotal evidence that crime at the neighborhood level does not appear to be a major problem when sufficient resources are committed to provide the required level of deterrents.

## Local Studies and Qualitative Research

There is a plethora of local studies and expert witness opinions supporting the Rappaport and National Gambling Impact Study Commission findings.

Two separate studies on the impact of crime in Joliet, Illinois (1994 and 1997) reported no increase in crime from riverboat casinos. The first study was performed by the Criminal Justice Information Authority and included both quantitative analysis of the Illinois Uniform Crime Report and calls-for-service data from October 1988 to August 1993 and interviews with local law enforcement officials. The second study, prepared for the American Gaming Association, showed the crime rate decreasing from 1993 to 1996.

Altoona, Iowa, Chief of Police John Gray specifically monitored the caseload resulting from casino operations at the Prairie Meadows Racetrack and Casino for ten years. He states with confidence that the law enforcement impact is negligible. Although the nightly attendance at the venue is typically between eight and ten thousand people, the impact on policing in the town of thirteen thousand residents is between 8 and 12 percent of the cases per month. He notes occasional complaints about lights used for night racing and noise associated with concerts from the two subdivisions closest to the track. Both of these issues are unrelated to the gaming aspect of the facility.

In Gretna, Louisiana, host to Boomtown Casino and an OTB video-poker facility, both the mayor and the police chief report no problems associated with either venue. In fact, the chief of police, crediting the internal security provided by the facilities, says that more calls for service are received from Home Depot and low-cost hotels in area than from the OTB parlor or Boomtown.

Similarly, in Bossier City, Louisiana, the police department has not observed any adverse community impact associated with casino operations in their jurisdiction. According to Bossier City Police Chief Mike Halphen:

"We heard there would be prostitution, but we get more prostitution off of Craigslist than we do from the casinos......Most of the stuff we've had at the casinos is someone's had too much alcohol...."

Citywide since 1994, the year riverboats opened the numbers of homicides, robbery, thefts and burglaries have declined dramatically in Shreveport/Bossier<sup>21</sup>, total crime is down over 30%. In 2008 the riverfront district in which the casinos are located had the lowest total crime rate of any district in the city. As can be seen in the table below, the decline in total crime in Shreveport/Bossier between 1995 and 2007 was 11 points greater than experienced nationally, and in some specific crimes categories such as murder and non-negligent homicide and larceny/theft the declines were in excess of 21 points greater than the national rate of decline. While these declines cannot be accredited directly to the advent of casinos (although their positive impact can be implied as a result of the increase in employment that the casinos have generated) it is also apparent that there has been no negative impact from casino development.

Innovation Group Project #157-08

<sup>&</sup>lt;sup>20</sup> Shreveport Times April 10, 2009 "Shreveport-Bossier City casinos' take tops \$9.7 billion. Local economic outlook was dire before riverboats opened 15 years ago"

<sup>&</sup>lt;sup>21</sup> Shreveport Bossier is home to six casinos grossing \$850 million in 2008 from 8,900 gaming positions.

Declining Crimes in Shreveport/Bossier Versus National Crimes 1995-2007

	Shreveport/Bossier City 1995-2007 Percent Change in Crime	National Rates 1995-2007 Percent Change in Crime	Differential
Murder and Non-negligent Manslaughter	-43.28%	-21.65%	-21.64%
Robbery	-23.58%	-23.32%	-0.26%
Property Crime	-35.32%	-28.91%	-6.41%
Burglary	-23.65%	-15.99%	-7.66%
Larceny & Theft	-39.44%	-17.87%	-21.57%
Total Crime	-30.10%	-18.83%	-11.27%

Source: FBI Uniform Crime Reports

In a 5-year statistical report for Riverboat gambling in Indiana the following was provided:

"According to Gary's Chief of Police, Majestic Star's presence has not contributed to any additional criminal activity in the neighborhood surrounding the riverboat. According to Hammond Police Department, crime in the area around the riverboat (Horseshoe) has not risen since the boat opened; in fact, it has fallen in most categories when compared to before the boat opened."<sup>22</sup>

A similar statement was also made by the Evansville Police Department which is home to Casino Aztar,

"Crime in the area around the riverboat has not risen since the boat opened; they indicated that they have more runs to the local mall than to the riverboat area." "The casino has not produced the negatives expected, like increased traffic and crime." "I have no reason to cut Aztar a break or anyone else a break.

A study of two urban casinos in New Zealand by the Australian Institute for Gambling Research at the University of Western Sydney corroborates these findings.

General crime incidents have occurred within and around the casino premises in Christchurch and Auckland, but the incidence has been no more than normally occurs with inner city entertainment venues of comparable size. . . .

There has been no overall increase in crime in the Christchurch Casino precinct, and a decrease in some crimes (sexual attacks, liquor offences, burglary and fraud). . . .

In Auckland there was an increase in public disorder offences in the casino precinct during the first few months of operation. Alcohol was a major factor in these crime incidents. Collaboration between the police and casino management resulted in a change in alcohol service policies and reduced these offences.<sup>23</sup>

The study credited the lack of impact to the following measures:

Innovation Group Project #157-08

<sup>&</sup>lt;sup>22</sup> Center for Urban Policy and the Environment at Indiana University-Purdue University (in coordination with the Indiana Gaming Commission) (July 2001) <a href="http://www.in.gov/gaming/reports/evaluations/majestic-5.pdf">http://www.in.gov/gaming/reports/evaluations/majestic-5.pdf</a> and <a href="http://www.in.gov/gaming/reports/evaluations/horseshoe-5.pdf">http://www.in.gov/gaming/reports/evaluations/horseshoe-5.pdf</a>

<sup>&</sup>lt;sup>23</sup> McMillen, J. (1999). Study of the social and economic impacts of New Zealand casinos. University of Western Sydney.

Effective casino management and crime prevention strategies contributed to an effective regulatory regime and minimization of crime. Casino management introduced preventative crime measures, including adequate site lighting and surveillance, a door policy to enforce dress and behavior standards, recruitment of ex-police officers to train and manage security and surveillance staff, and the application of trespass notices to remove offenders. Each casino also has an 'exclusion' policy to allow patrons to self-bar if they so choose. Both casinos have established close liaison and cooperation with the local police.<sup>5</sup>

The argument and counter argument for the impact of casinos on neighborhood crime is directly addressed in an article about crime and casinos in Detroit:

From the steps of the historic Second Baptist Church, the Rev. Kevin M. Turman sees people stream into the Greektown Casino across the street. It's a sight the pastor was once loath to accept."I thought they set the wrong moral tone," Turman said. "I thought they were a magnet for crime. I thought they were economically counterproductive."The fact that the casinos are paying taxes on their income has helped the city at a time when it needed help. "While they aren't a panacea for all the city's ills, the casinos have hushed many critics, including Turman, who thought they'd bring only more crime and blight.

Soon after the first temporary casino opened eight years ago, downtown crime decreased, while development and redevelopment increased. The casinos were never expected to revitalize neighborhoods, but their prosperity has been good for the region, a spokesman for the mayor said.

From 2001 to 2005, crime incidents in downtown Detroit dropped from more than 3,000 to 2,025. More than half were larcenies, a Wayne State University study shows."The casinos have been a bit of a stabilizing force," said Don Holecek, a Michigan State professor and former head of the school's travel and tourism resource center.<sup>24</sup>

In a December 2008 in a radio interview the mayor of Michigan City, Indiana (host to Blue Chip Casino) stated that overall crime was down since the advent of the casino but there was more traffic, more accidents, and more DUI arrests.

The Center for Urban Policy and the Environment at Indiana University-Purdue University has prepared 5-year evaluations of riverboat licensees for the Indiana Gaming Commission which contain section on community impacts. The following are excerpts from these reports with respect to police and fire protection.

"According to the Evansville Police Department, crime in the area around the [Casino Aztar] riverboat has not risen since the boat opened; in fact, in 1999 it even fell when compared to the previous year."

"According to Gary's Chief of Police, Trump's presence has not contributed to any additional criminal activity in the neighborhood surrounding the riverboat."

"According to the Hammond Police Department, crime in the area around the [Horseshoe Hammond] riverboat has not risen since the boat opened; in fact, it has fallen in most categories when compared to before the boat opened."

<sup>24</sup> USAToday.Com 2007

"According to a phone interview with the chief of the Rising Sun police, the main increase in crime in the area that can be attributed to the [Grand Victoria] riverboat is an approximately 25 percent increase in alcohol-related crimes, (driving under the influence, public intoxication, etc.). He also pointed out that they have had an approximately 400 percent increase in traffic through the area. Given that level of traffic, the increase is not as much as might have been predicted."

"According a phone interview with the Lawrenceburg Police Department, Argosy-related arrests for public intoxication, DWI, and minor theft, as well as traffic accidents in the area have increased slightly each year from 1997 to 2000. Lawrenceburg has added two police officers since the boat opened to deal with the increased caseload."

"According to a phone interview with East Chicago's police department, the neighborhood surrounding the [Harrah's] riverboat has not experienced any additional criminal activity that can be attributed to the riverboat's presence. Crime in East Chicago has decreased substantially over this time period due to increased cooperation with federal agencies, community policing and increased staffing. Traffic to the rest of the city has not increased because of the direct access from the highway to the casino."

"According to a phone interview with Michigan City's chief of police, the neighborhood surrounding the riverboat has not experienced additional criminal activity that can be attributed to Blue Chip's presence."

Several other sources cite examples of the minimal impact of crime in casino communities.

"Segarini, president and CEO of Tuolumne County Chamber of Commerce and a member of the board of directors of the Tuolumne Economic Development Co. 'I haven't heard any negative remarks from anyone at this point,' Segarini said of the Black Oak Casino that opened in Tuolumne in 2001. 'There were some fears by some of the neighbors in the area that with the construction of the new facility and the bringing in of alcohol that there would be some problems they had not had previously. But if there are any problems, they have been very minor." 25

"According to data compiled from the FBI's Uniform Crime Reporting programme, Las Vegas has a lower crime rate and is safer than virtually every other major American tourist venue. The crime rate in Atlantic City, New Jersey has fallen dramatically since 1991. Joliet, Illinois, is experiencing its lowest crime rate in 15 years. Crime rates in Baton Rouge, LA have decreased every year since casino gaming was introduced." 26

"In 1998, 24 sheriffs from various states in the USA met to explore the issue. They concluded that they could identify "no connection between gaming and crime" in their jurisdictions, some even pointed to a decrease in crime in their communities. A March 2000, report by the Public Sector Gaming Study Commission, stated that "...the majority of the information collected during the past decade indicates there is no link between gambling, particularly casino-style gambling and crime."

<sup>&</sup>lt;sup>25</sup> "New gold rush sweeps Lode: Casinos pour millions into sleepy towns. But such riches can come at a price: drugs, crime, crippling gambling addictions." *Record* (Stockton, CA), Sept 30, 2006:

<sup>&</sup>lt;sup>26</sup> "Casinos and crime: A new myth based on an old reality." The America's Intelligence Wire, August 24, 2003.

<sup>&</sup>quot;Casinos and crime: A new myth based on an old reality." The America's Intelligence Wire, August 24, 2003.

"Foxwoods Resort Casino opened in southeastern Connecticut, the area has not observed a significant increase in crimes against property. Traffic-related crimes and accidents have increased however, creating a need to expand the police force."<sup>28</sup>

"Officials in Chester and Bensalem say they have seen no uptick in crime in their communities that can be attributed to Harrah's Chester and Philadelphia Park, whose slots parlors opened in January 2007 and December 2006, respectively."<sup>29</sup>

"In a Gallup poll...67 percent of those surveyed said they believe that opening a casino helps a community's economy and three-fourths said they approve of state lotteries." 30

A study of two urban casinos in New Zealand by the Australian Institute for Gambling Research at the University of Western Sydney corroborates these findings.

General crime incidents have occurred within and around the casino premises in Christchurch and Auckland, but the incidence has been no more than normally occurs with inner city entertainment venues of comparable size. . . .

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In Auckland there was an increase in public disorder offences in the casino precinct during the first few months of operation. Alcohol was a major factor in these crime incidents. Collaboration between the police and casino management resulted in a change in alcohol service policies and reduced these offences.<sup>31</sup>

The study credited the lack of impact to the following measures:

Effective casino management and crime prevention strategies contributed to an effective regulatory regime and minimization of crime. Casino management introduced preventative crime measures, including adequate site lighting and surveillance, a door policy to enforce dress and behavior standards, recruitment of ex-police officers to train and manage security and surveillance staff, and the application of trespass notices to remove offenders. Each casino also has an 'exclusion' policy to allow patrons to self-bar if they so choose. Both casinos have established close liaison and cooperation with the local police.<sup>6</sup>

It is likely however that traffic violations will increase with a greater number of people traveling to the casinos. There will also be new unique casino related crimes such as patrons attempting to cheat and passing counterfeit money that criminal justice officials will have to prosecute.

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<sup>&</sup>lt;sup>28</sup> Browne, M. Neil and Nancy K. Kubasek. "Should we encourage expansion of the casino gaming industry?" Review of Business, Spring 1997 Volume 18 Number 3 (9).

<sup>&</sup>lt;sup>29</sup> "Slots, sleaze & slippery slopes: Sure, casinos have crime. But is it really bad enough to worry about?" *Philadelphia Daily News* (Philadelphia, PA), August 18, 2008.

<sup>30 &</sup>quot;Study finds one sure bet: Casinos bring higher crime." The Atlanta Journal-Constitution (Atlanta, GA), June 17, 1999.

<sup>31</sup> McMillen, J. (1999). Study of the social and economic impacts of New Zealand casinos. University of Western Sydney.

impact on policing in the town of thirteen thousand residents is between 8 and 12 percent of the cases per month. He notes occasional complaints about lights used for night racing and noise associated with concerts from the two subdivisions closest to the track. Both of these issues are unrelated to slots.

In addition, two separate studies on the impact of crime in Joliet (1994 and 1997) reported no increase in crime from riverboat casinos. The first study was performed by the Criminal Justice Information Authority and included both quantitative analysis of the Illinois Uniform Crime Report and calls-for-service data from October 1988 to August 1993 and interviews with local law enforcement officials. The second study, prepared for the American Gaming Association, showed the crime rate decreasing from 1993 to 1996.

## Case Studies, Neighborhood Impacts

While the evidence clearly shows that crime rates are generally unaffected in a measurable way at the city- or county-level, there is the concern that crime would increase at the neighborhood level where the casino is located. This is based on the proposition that if there is a substantial increase in suitable targets, then there is the potential that criminals will focus on this area.

A report to the Pennsylvania Gaming Control Board by Price Waterhouse Cooper and the Bureau of Investigation and Enforcement indicated typical security incidents around casinos in jurisdictions it studied were purse snatching, disorderly conduct, counterfeiting and coin bucket theft.<sup>32</sup> Coin bucket theft would obviously be eliminated if a coinless (ticket in/ticket out) system is used at casinos in Bermuda, as is now the case in most major North American gaming jurisdictions.

However, casinos are acutely aware of that potential and therefore devote considerable resources in providing adequate security to deter on-site crimes. This is not only driven by responsibility to their patrons but also from a profit perspective. In a survey conducted for the Philadelphia Gaming Advisory Task force (PGATF) in 2005 as part of a study directed by The Innovation Group safety and security perceptions of the casino site played a paramount role in the process of deciding which casino to visit.

As discussed below, the data and the anecdotal evidence available suggest that crime at the neighborhood level does not appear to be a major problem when sufficient resources are committed to provide the required level of casino security and increased police patrols.

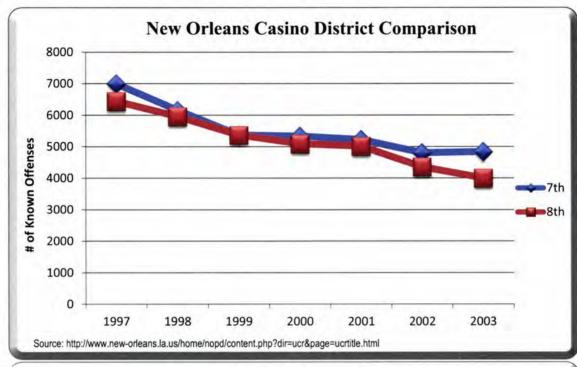
## New Orleans, Louisiana

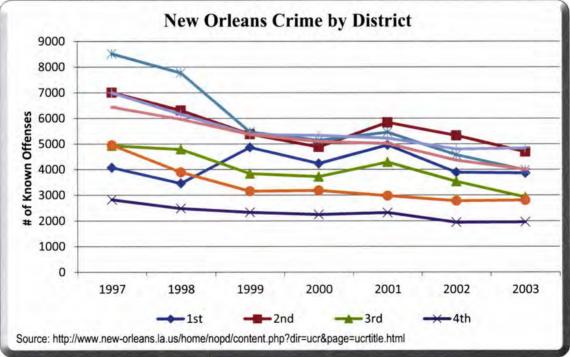
In New Orleans, based on district-level crime statistics, crime rates and traffic offenses declined between 1997 and 2003<sup>33</sup> in the 7<sup>th</sup> district (Harrah's opened in the 7<sup>th</sup> District in October of 1999) and 8<sup>th</sup> district (Bally's). These declines have been consistent year over year compared to the first second and third districts where this general decline was

<sup>32</sup> Pennsylvania Gaming Control Board Web site, May 18, 2005

<sup>&</sup>lt;sup>33</sup> Data by district is unavailable after 2004 and would be unrepresentative due to the disruption caused by Hurricane Katrina.

interrupted by a slight upward increase in 2001. Significantly, crime such as robberies and thefts declined in these districts. It should be noted that an increase in crime did take place following this time period and is largely attributable to Hurricane Katrina.





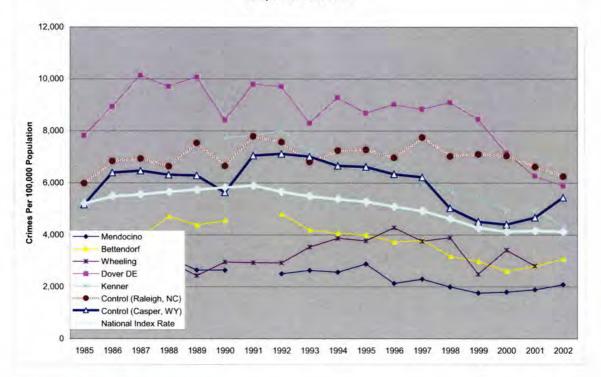
#### Casinos in Residential Areas

The vast majority of casinos in the US are located in rural areas or in commercial or industrial districts. However, we identified two that are close to residential neighborhoods: Wheeling Island Racino in West Virginia and the Black Bart Casino in Willits, California. In addition, The Downs at Albuquerque is located in a residential infill neighborhood, and the Isle of Capri riverboat casino in Bettendorf, Iowa is located across a major thoroughfare from a historic riverfront neighborhood. Dover, Delaware (host to the Dover Downs slot racino) and Kenner, Louisiana (host to the Treasure Chest riverboat casino) were also studied. In addition, law enforcement officials in the New Orleans area, Louisiana, and Iowa were surveyed.

Crime data research consisted of telephone interviews with local law enforcement officials supplemented by crime statistics compiled by the federal Bureau of Justice Statistics or local police stats. It should be emphasized that the crime statistics are undiluted (not adjusted for casino visitors: crimes per 100,000 permanent residents only) and include on-site crimes.

For comparison, the national crime index rates and the rates for Raleigh, North Carolina and Casper, Wyoming, which are very far from any gambling venues while being normative cities (i.e., no unusual rates of crime), were tabulated and graphed with the subject communities. The national rates, which indicate a steady decline for the period, fall squarely in between the various communities, as would be expected of aggregated data; most of the communities with gambling have lower crime rates than the national rates. This supports the conclusion that slots are not affecting an overall reduction in crime reported for the communities considered.

#### Composite Index Crime



#### Wheeling, West Virginia

Wheeling Island is a slot racino located within a residential neighborhood. To access the facility requires driving approximately one mile through a traditional residential neighborhood, and there is housing directly across the street from the parking lot of the facility. The racino opened in September 1994 with 400 video lottery terminals, with 200 additional devices added in late 1995. Reel slot machines were approved in 1999, and by 2000 Wheeling had just over 1,000 machines.

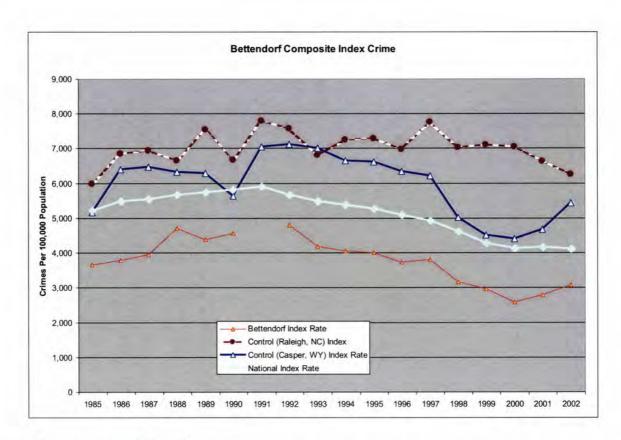
Undiluted crime statistics for the city of Wheeling shows slight increases in 1996 and 2000. The first slight increase could show support for Grinols' time lag theory, or it could be the result of increased activity at the facility as a result of the expansion in late 1995. The second slight increase would appear to be related to the expansion of the facility for reel slot machines and the dramatic increase in patronage. Wheeling Island receives the vast majority (upwards of 90 percent) of its patrons from out of state, including Pittsburgh and Columbus, Ohio, and thus the daily population is far larger than the permanent resident population of approximately 34,000. West Virginia does not track casino admissions; however, in 2000, based on our knowledge of the market and a calculation of reported gaming revenues divided by a win per admission, we would conservatively estimate that casino patrons increased the daily population by 19 percent over the resident population of 31,419. This would bring the 2000 crime index down to 2,765, below the pre-racino level of over 2,900 (1990-1992) and well below the 1993 slight increase of 3,529.



Since these data do not distinguish between on-site and off-site crimes, we contacted the local sheriff's department to find out whether the surrounding neighborhood had been affected by the racino. The chief deputy of the Ohio County Sheriff's Department said that as far as he was aware, there had been no increase in crime in the community or increased burden to local law enforcement.

### Bettendorf, Iowa

Bettendorf is host to the Isle of Capri Casino, which opened in April 1995. There is no apparent impact on crime, either an immediate bump from an increased daily population or a delayed slight increase based on a Grinols' time lag. Crime declined in 1995 and 1996; although there was a slight increase in 1997, the rate was still below the 1995 level. In 1998, 1999, and 2000, when a Grinols' time lag increase should be appearing, instead saw further declines. It is also interesting to note that two other casinos opened in the area in mid-2001 and a third in mid-2002, but their impact is also not apparent, with a downward trend beginning in 1993 (unfortunately, data for 1991 was unavailable).



#### Albuquerque, New Mexico

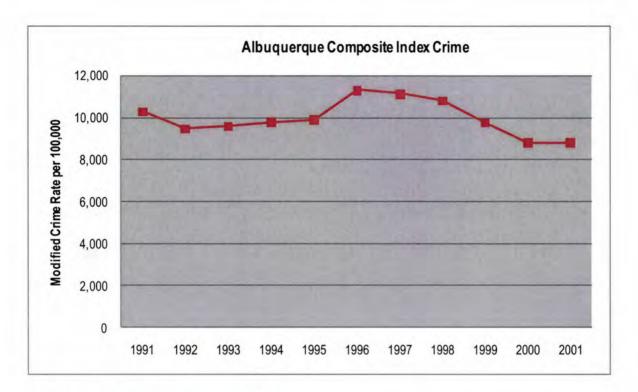
The Downs at Albuquerque opened in late 1999 with 300 machines. The Albuquerque Police Department compiles crime statistics that are available beginning in 2000. Given the availability of the data, it is impossible to do a before-and-after analysis. However, for 2001 through 2003, crime has declined in the police beat (333) which contains the Downs. This is especially notable compared to Albuquerque as a whole, which showed an increase in 2001 and smaller declines in 2002 and 2003. Traffic crimes have been excluded.

Albuquerque Non-Traffic Crime

	2000	2001	2002	2003
Beat 333	3,560	2,974	2,609	2,390
Change		-16.50%	-12.30%	-8.40%
Albuquerque	130,872	133,520	128,608	119,752
Change		2.00%	-3.70%	-6.90%

Source: Albuquerque Police Department

Earlier crime data is available for the city as a whole based on federal Bureau of Justice Statistics, as shown in the following chart. Crime in Albuquerque peaked in 1996, and declined steadily through 2000, thus here is no evident impact from the Downs in the rate for 2000.

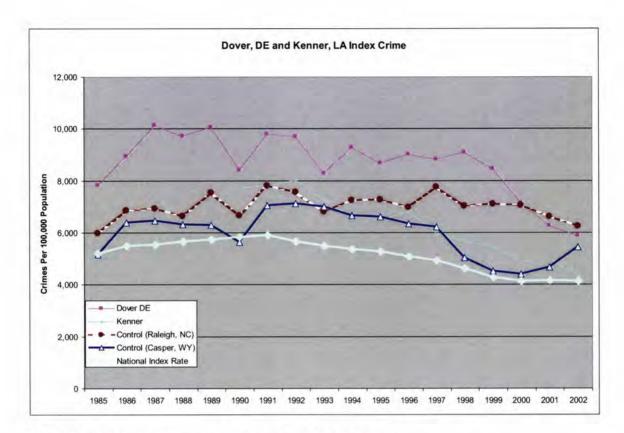


### Other Host Communities

Two other casino communities were analyzed for federal Bureau of Justice Statistics:

Dover Downs opened in December of 1995 with 620 slot machines, growing to 1,000 machines in 1997 and 2,000 machines in 2000. The crime rate for the city of Dover was relatively steady for 1996 through 1998, but then began a steep decline in 1999 that lasted through 2002.

Treasure Chest in Kenner opened in September of 1994, and except for a slight increase in 1996, the crime rate in Kenner has declined at a faster rate than the national average or the two controls.



## Typical Crimes in a Casino Neighborhood

A report to the Pennsylvania Gaming Control Board by Price Waterhouse Cooper and the Bureau of Investigation and Enforcement indicated typical security incidents around casinos in jurisdictions it studied were purse snatching, disorderly conduct, counterfeiting and coin bucket theft. (They indicated, however, that the coin bucket theft might be of less consequence if a coinless (ticket in/ticket out) system is used in the Pennsylvania slot-only casinos.<sup>34</sup>)

Among other crimes that have been noted around a casino are driving while intoxicated incidents. A study by the Louisiana Insurance Commissioner, for example, reveals that the highest rate of alcohol-impaired driving crashes took place in counties that surround the state's riverboat casinos.<sup>35</sup>

## Summary

Based on the data, there is no evidence for large increases in major crimes within the adjacent casino neighborhoods. In an urban setting where sufficient on-site security is provided, and supplemental police patrols provided in the surrounding neighborhoods, major criminal activity can be minimized and increases in crime can be effectively eliminated.

<sup>34</sup> Pennsylvania Gaming Control Board Web site, May 18, 2005

<sup>35</sup> EAP Digest as part of a presentation at the National Council on Problem Convention.

Other activity related to public disorder, traffic violations, DUI, etc. may increase but no more so than any other entertainment venue which attracts large numbers of visitors. Cheating in the casinos, passing bad checks are two other unique areas where arrests are likely to occur. For the most part these impact only the casino, and are largely dealt with through casino security, surveillance and credit departments, with local or police only called in to make the arrests when appropriate.

## CRIMES AS A RESULT OF PROBLEM GAMBLING

Central to assessing the impact on crime is the question of problem or pathological gambling. Crimes relating to problem gambling have been held to represent the predominant impact on crime from casino developments.

Problem gambling is an urge to gamble despite harmful negative consequences or a desire to stop. It is often defined by whether harm is experienced by the gambler or others such as the gamblers' family, significant other, spouse, friends or coworkers rather than by the gamblers' behavior. A problem gambler may or may not be a pathological gambler. Pathological or compulsive gambling is defined as a mental disorder characterized by a continuous or periodic loss of control over gambling, a preoccupation with gambling and with obtaining money with which to gamble, irrational thinking, and a continuation of the behavior despite adverse consequences.

Much of the debate on this topic has focused on two areas:

- Prevalence of problem gambling
- General area-wide increases in crime as a result of the introduction of casinos.

The following section discusses various concerns and perceptions about certain crimes including financial crimes of burglary, theft, embezzlement and robbery, a discussion of problem gamblers in the criminal justice system, loan sharking, prostitution, and crimes around a casino environment.

Some social scientists believe that many of the financial crimes of burglary, theft, embezzlement and robbery in a gaming environment are committed by problematic gamblers.

It should be noted at this point that the proportion of the population classified as problem gamblers is very small at 2% while those classified as pathological gamblers, from which many of the problems subsequently described below are derived, are no more than 0.9% of the population. In addition many of these pathological gamblers also exhibit other social problems such as personality disorders, alcoholism, or drug abuse which are not causally related to problem gambling but are symptomatic of the personality problems of the individual. It should also be noted that the prevalence of pathological and problem gambling is significantly lower than that for other problems such as alcoholism. For example in the US the prevalence for substance abuse is 11%<sup>36</sup>. In most cases these other issues and problems are present prior to exhibiting pathological gambling tendencies and can be considered an existing burden on the community unrelated to gambling. So while individually the problems outlined below can be a serious issue for the individual and health and law enforcement officials attempting to address them the overall incremental impact on the community as a result of the introduction of gaming is very small as are the number of crimes committed by problem gamblers that can be laid squarely at the door of

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<sup>&</sup>lt;sup>36</sup> Health in the Americas, Volume II, the National Comorbidity Survey (NCS): by Kessler et al., 1994 for alcohol and drug prevalence

gambling addictions. This point is further illustrated by the lack of notable increases in criminal activity overall as a result of the introduction of casino gaming in the numerous jurisdiction cited in this report.

The proliferation of internet access has already provided access to internet gambling and pathological gamblers are in all likelihood already displaying the problems to society noted above. In the absence of casino gaming there is no mechanism to identify them and to provide the resources needed to treat these individuals.

These points should be borne in mind when reading the following sections of this report.

## Robbery/Assault

Some preliminary research does make a connection between robbery and *pathological* gambling.

A report funded by and published by the U. S. Department of Justice, for example, studied arrestees in Las Vegas, Nevada and Des Moines, Iowa—both of which have casino gaming. In these jurisdictions, more than 30 percent of pathological gamblers who had been arrested reported having committed a robbery in the past year, nearly double the rate of low-risk gamblers. Of those, nearly one-third admitted that they had committed the robbery to pay for gambling or to pay gambling debts. About 13 percent said they had assaulted someone to get money.<sup>37</sup>

Nearly 40 percent of the subjects in the study had committed more than one theft in the past year, four times the number of arrestees without either a gambling or a substance abuse problem.

As noted previously the proportion of the population that will succumb to such criminal activities a result of pathological gambling is very small (0.9%) and of these a large proportion, at minimum 35%, are likely to be suffering from other longstanding personality problems or drug or alcohol abuse. Overall then the likely impact from the small increase in

If further research confirms that pathological gamblers do have higher incidences of robbery and assault, this would point to the urgency in early identification of pathological gamblers in all jurisdictions and intensified efforts to get them into treatment or self-help recovery groups before their criminal activities escalate. In the U. S. Department of Justice study, for example, only 13 percent of pathological gamblers in the study said they had sought treatment and only 10 percent said they had attended Gamblers Anonymous.

<sup>&</sup>lt;sup>37</sup>U.S. Department of Justice Office of Justice Programs National Institute of Justice, July, 2004

The Solicitor General in a previously referenced source also suggested that responsible gaming practices could possibly alleviate some of the pathological gambling-induced crimes.<sup>38</sup>

We would draw the reader's attention to the points made in the introduction of this section regarding the overall size of the problem represented by pathological and problem gamblers.

#### Embezzlement

Regardless of the reasons a person embezzles funds, this type of crime has the potential to disrupt the life of many individuals who do not personally know the embezzler or ever come in contact with the person. Embezzlement also differs from theft or larceny in that the property or funds had lawfully been entrusted to the person who later abused that trust.

The number of incidences in which embezzlements occur may be underreported, for often businesses, non-profit organizations and others who are victims of an embezzler choose not to report the crime and thus avoid bad publicity for the company or the organization.

A review of recent gambling-related embezzlements in various parts of the country, however, shows both the wide variances of trusted employees or guardians who commit criminal acts related to gaming activity and the impact it has on members of the group:

Whether the motivation for embezzlements is gambling or some other need for money, this type of theft can have a profound—and often rippling—affect on many people as shown in these two examples.

Those who have been victimized by gambling-related embezzlements emphasize the importance of businesses, governmental units, non-profit organizations and even churches and PTA-type organizations strengthening both their policies and procedures and internal controls to avoid a multiplication of embezzlements in a new gaming jurisdiction.

It is also suggested that these same institutions review their policies, policies and practices to protect the institutions or organizations from burglary and theft. Even churches are not immune, as reported incidences ranged from respected elders stealing money from the collection plate<sup>39</sup> or problematic gamblers breaking into churches.<sup>40</sup>

We would draw the reader's attention to the points made in the introduction of this section regarding the overall size of the problem represented by pathological and problem gamblers.

<sup>38</sup> Greater New Orleans Broadcasting Association, Inc. op. cit.

<sup>&</sup>lt;sup>39</sup> e-Update, Texas Council on Problem and Compulsive Gambling.

<sup>&</sup>lt;sup>40</sup> A compulsive gambler in Wisconsin had broken into over 50 churches for his gambling money

## Problem Gamblers in the Criminal Justice System

Considerable dialogue has centered by criminal justice experts on whether persons who commit a crime and who are also diagnosed as a pathological gambler in the DSM-IV criteria should be considered as criminals or treated as someone with an illness.

This question was discussed in a series on crime and addiction by a professor in criminology at the University of California-Irvine:

There have been cases in which a sympathetic judge granted a "downward departure" for a convicted "pathological gambler." Such instances primarily appear to involve a belief that the mandated term of imprisonment was too severe for the actual offense. This procedure came to an end, however, when Congress in 2003 singled out pathological gambling as an excuse no longer qualifying for a reduced sentence. 41

Several jurisdictions have looked at alternative solutions.

In Louisiana, the State Attorney General initiated a diversionary program in which a district attorney can make a determination if a non-violent crime is the direct result of problems with gambling. If so, the person is referred to the state's treatment program and thus is diverted from jail. In order to avoid jail, however, the gambler must go through the treatment program and make restitution. Even though it is a voluntary program, more than 35 percent of the state's district attorneys are using the program. 42

In Minnesota state law mandates that persons committing certain types of crimes undergo a compulsive gambling assessment.

A therapeutic gambling treatment court in Amherst, New York has drawn wide acclaim for its gambling treatment court, modeled after traditional drug treatment courts.

Criminal justice researchers have also voiced the need for treatment for problematic gamblers in the criminal justice system to reduce the chances of relapses once prisoners are released.

In the Department of Justice report on Gambling and Crime Among Arrestees, researchers also explored the need for alternative treatment for problematic gamblers while serving their sentences:

Being behind bars is likely to worsen the gambling habits of many compulsive or pathological gamblers. Although it is officially banned, gambling is difficult to control in prisons and jails. It is a diversion from the monotony of jail. As a result, jailed arrestees and prison inmates may accrue significant gambling debts behind bars that can only be paid off by committing further crimes after their release. Authorities could provide increased attention to gambling behaviors in detention centers, jails and prisons. 43

<sup>41</sup> www.basisonline.org

<sup>&</sup>lt;sup>42</sup> Personal communication with the Louisiana Association of Problem Gambling, June 6, 2005.

<sup>&</sup>lt;sup>43</sup> U. S. Department of Justice, Gambling and Crime Among Arrestees: Exploring the Link.

## Loan Sharking

There appears to be some indications that problematic gamblers turn to this form of finance. In the South Oaks Gambling Screen (a screening instrument that is often used in problematic gambling measurements), for example, one of the questions is "If you borrowed money to gamble or to pay gambling debts, did you borrow from loan sharks?"

The connection between loan sharks and problematic gambling may be a worldwide issue. In China, for example, a psychiatrist reviewed the circumstances and client records of 56 gamblers he was treating who later took their own lives. He remembered these clients as under "tremendous pressure from loan sharks who harassed them" and estimated that 30 percent of their debt was to loan sharks.<sup>45</sup>

Consumer advocates perceive this type of loan as predatory lending practices:

Unlicensed lenders, sometimes known as loan sharks, will offer money to those in need of cash. However, there is always a major catch - how much has to be paid back. The terms on offer will usually be very poor. There are many cases of people borrowing a small sum of money and paying double or triple that original sum in interest.<sup>46</sup>

We would draw the reader's attention to the points made in the introduction of this section regarding the overall size of the problem represented by pathological and problem gamblers.

#### Prostitution

The subject of the connection between prostitution and gambling often appears in debates when a jurisdiction considers adding casino-type gaming.

Most of the references in a literature review to connection between prostitution and gambling appear to be with illegal gambling or a combination of illegal gambling, prostitution, and drugs. Some jurisdictions seem to link these three together in a "vice" department.

There have, however, been isolated incidents with legal gaming establishments. In 2002, for example, the Indiana Gaming Commission levied a \$2.26 million fine and ordered a casino to close for more than two days over allegations a casino executive had provided guests with prostitutes and money for gambling during a golf outing. The casino executive was forced to sell his stock in the gaming company and relinquish his Indiana gaming license. Again, these types of incidents have been very rare in the gaming industry over the past 30 years.

47 Las Vegas Sun, 7/30/2002.

<sup>44</sup> South Oaks Gambling Screen, copyright 186 by the South Oaks Foundation.

<sup>&</sup>lt;sup>45</sup> Wong Fei Wan, todayoneline.com, April 15, 2005

<sup>46</sup> www.insolvencyhelpline.co.uk, accessed July 6, 2005

In general prostitution has not been a serious problem for local law enforcement agents as Similarly, in Bossier City, Louisiana, Police Chief Mike Halphen noted:

"We heard there would be prostitution, but we get more prostitution off of Craigslist than we do from the casinos......Most of the stuff we've had at the casinos is someone's had too much alcohol....."

Among other crimes that have been noted around a casino are driving while intoxicated incidents. A study by the Louisiana Insurance Commissioner, for example, reveals that the highest rate of alcohol-impaired driving crashes took place in counties that surround the state's riverboat casinos.<sup>49</sup>

An early study in Biloxi would tend to corroborate the first part of Grinols' theory. Chang (1996) found a decrease in crime the first full year of casino development, while the second year saw crime rates return to pre-casino levels. Unfortunately, it does not appear the study has been updated, although a 2000 study on bankruptcy found that bankruptcy rates actually decreased in Biloxi with the advent of casino development. The studied attributed the cause to the destination nature of Biloxi and the infusion of visitor spending to the Biloxi economy.

In the total sample group of 156 counties, the Rappaport study found a decrease of 3 reported crimes per 1,000 residents, and 6 fewer crimes per 1,000 in the more populated counties (57 counties), although this additional decrease was not statistically significant. The study concludes,

In sum, casinos are not associated with general increases in crime rates. The total number of crimes can be expected to increase with the introduction of casinos, but only because casinos are associated with population increases which are far larger than any possible decrease in the number of crimes per resident.

There is no evidence from this gross level data that the advent of casino can have a measurable impact on city-wide crime rates in general. It is highly likely that any crimes associated with casinos are either offset by the economic benefits brought by casinos or the level of crime is so small as to be overwhelmed by other more significant factors such as the economy.

### Bermuda's Crime Statistics

To provide a basis for future analysis of the impact of casinos on crime we have provided the following information obtained from the Bermuda Police Service. It is of note here that since 2004 crimes overall have been increasing, with the greatest increase seen in the burglary category. Among violent crimes robbery has shown the greatest increase. These crimes are often related to economic issues possibly fueled by substance abuse. It may be that the proposed programs and mitigation efforts introduced as part of casino

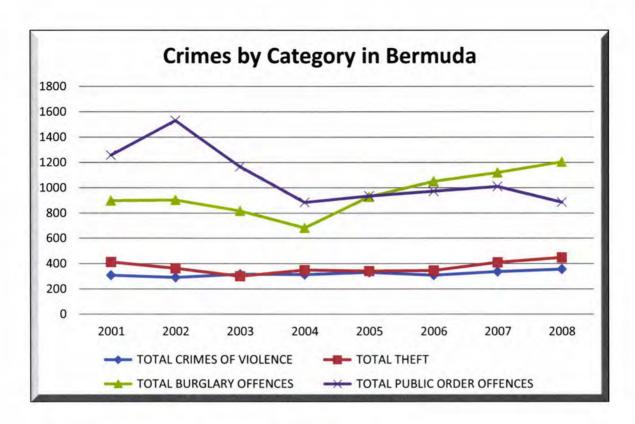
<sup>&</sup>lt;sup>48</sup> Shreveport Times April 10, 2009 "Shreveport-Bossier City casinos' take tops \$9.7 billion. Local economic outlook was dire before riverboats opened 15 years ago"

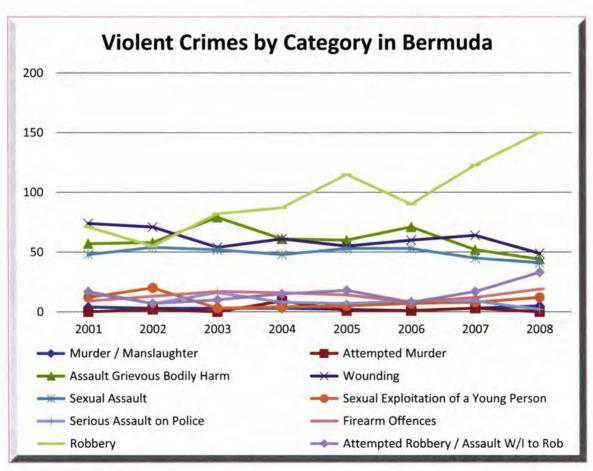
<sup>&</sup>lt;sup>49</sup> EAP Digest as part of a presentation at the National Council on Problem Convention.

development will help in remediating these increases by identifying and providing counseling for some of these substance abusers, a significant proportion of whom will also display problem gambling issues, and who hitherto have gone unidentified and untreated. In addition employment generated by the casino directly and indirectly could act to reduce economic stress and thereby help reduce the economic stimulus for some of these crimes.

Bermuda Crime Reports by Category 2001-2008

CRIME	2001	2002	2003	2004	2005	2006	2007	2008
Murder / Manslaughter	4	3	3	3	2	1	3	5
Attempted Murder	0	2	0	9	1	1	3	0
Assault Grievous Bodily Harm	57	58	79	61	60	71	52	44
Wounding	74	71	54	61	55	60	64	49
Sexual Assault	48	54	52	48	53	53	45	41
Sexual Exploitation of a Young Person	12	20	3	4	5	7	8	12
Serious Assault on Police	16	7	16	8	7	9	9	2
Firearm Offences	9	13	17	16	14	8	12	19
Robbery	71	55	82	87	115	90	123	150
Attempted Robbery / Assault W/I to Rob	17	7	10	15	18	8	17	33
TOTAL CRIMES OF VIOLENCE	308	290	316	312	330	308	336	355
Theft From Person	101	78	88	122	126	139	166	138
Handbag / Attempted Handbag Snatch	26	18	20	24	10	15	16	10
Theft from Hotel	37	38	19	21	23	19	16	16
Theft from Guest House	10	20	6	19	11	13	13	6
Theft from Unattended Vehicle	238	208	167	162	171	159	199	278
TOTAL THEFT	412	362	300	348	341	345	410	448
Residential	446	391	325	313	453	572	655	638
School	35	30	36	29	36	30	21	35
Shop	84	111	81	69	80	125	76	88
Office	40	58	50	34	48	71	47	39
Other Burglary Offences	178	202	195	120	210	137	202	265
Attempted Burglary	114	110	129	116	100	114	118	138
TOTAL BURGLARY OFFENCES	897	902	816	681	927	1049	1119	1203
TWOC Cars	75	58	51	42	57	56	92	64
TWOC Motor Cycles	720	911	624	487	511	519	522	505
TWOC Auxiliary Cycles	360	425	366	262	284	262	263	212
TWOC Livery Cycles	86	124	102	83	64	108	107	78
TWOC Other Vehicles	16	12	22	9	18	27	25	26
TOTAL TWOC	1257	1530	1165	883	934	972	1009	885
TOTAL PUBLIC ORDER OFFENCES	0	0	0	0	0	0	0	27
GRAND TOTAL	2874	3084	2597	2224	2532	2674	2874	2918





#### Recommendations and Conclusions

This analysis has addressed the research-based claims for the impact of casino development on crime. We believe that in jurisdictions where sufficient on site security is provided, and supplemental police patrols provided in the surrounding neighborhoods, that major criminal activity can be minimized. It is our conclusion that:

- There is no evidence for jurisdiction-wide increases in major crimes either property or violent. It is likely that these are effected by larger economic and societal variables
- When there is an adequate level of police presence and casino security there is no
  evidence of an increase in major crimes, whether violent or property related, in the
  immediate neighborhood of the casino. It is in the casinos interest to provide added
  levels of security given the importance this plays in the consumers' choice of casinos
  to visit.
- Past research on crime rates has been flawed in that it has failed to account for the differences between casino located in low population, low crime rate rural areas and those in high population high crime rate urban areas. Past research has also failed to account for the influx of visitors in developing and applying crime rates. Some studies have failed to consider trends over a long enough periods and have failed to identify larger more important causal factors at work in the economic and social realms. These flaws have tended to exaggerate the impact of casinos on crime in major urban areas.
- In Detroit there was some suggestion from the data that temporary spikes in vice related arrests can be expected in the year or two following the advent of gaming but that these subsequently decline. This situation was not a strong relationship given the ambiguity of the data. Arrest rates may increase in the first year as the criminal element rapidly discovers that this target rich area is fraught with difficulties in executing their criminal activities, but it is likely to decline rapidly to normal levels thereafter.
- Other activity related to public disorder, traffic violations, DUI etc. are certain to
  increase but no more so than any other entertainment venue which attracts large
  numbers of visitors. Cheating in the casinos, passing bad checks are two other unique
  areas where arrests are likely to increase. For the most part these are victimless
  crimes impacting only the casino, and are largely dealt with through casino security,
  surveillance and credit departments, with local or police only called in to make the
  arrests when appropriate.
- It should be noted that the proportion of the population classified as problem gamblers is very small at 2% while those classified as pathological gamblers, from which many of the problems subsequently described below are derived, are no more than 0.9% of the population. Many of these pathological gamblers also exhibit other social problems such as personality disorders, alcoholism, or drug abuse which are not related to problem gambling but are symptomatic of the personality problems of the individual.
- The prevalence of pathological and problem gambling is significantly lower than that for other problems such as alcoholism. For example in the US the prevalence for

substance abuse is 11%<sup>50</sup>. In most cases these other issues and problems are present prior to exhibiting pathological gambling tendencies and can be considered an existing burden on the community unrelated to gambling. Overall incremental impact on the community as a result of the introduction of gaming and the small number of crimes committed by pathological gamblers is very small as are the number of crimes committed by problem gamblers that can be laid squarely at the door of gambling addictions. This point is further illustrated by the lack of notable increases in criminal activity overall as a result of the introduction of casino gaming in the numerous jurisdiction cited in this report.

The proliferation of internet access has already provided access to internet gambling
and pathological gamblers are in all likelihood already displaying the problems to
society noted above. In the absence of casino gaming there is no mechanism to
identify them and to provide the resources needed to treat these individuals. These
points should be borne in mind when reading the following sections of this report.

Based on the available research, actions that will help prevent crime include the following:

- Ensure a prominent level of security off the premises provided for by casino sponsored additional police patrols in the local neighborhoods
- Ensure that the casino has more than adequate on-site security in the building and especially within the parking lots or garages.
- · Pro-active monitoring of problem gambling at the facility
  - Self-exclusion programs are becoming standard industry practices
- Develop an information package to address citizens concerns regarding the true facts in relation to casinos and crime.
- Recommend that the current crime reporting system be reviewed such to ensure that it
  will adequately capture and identify casino related crimes.

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<sup>&</sup>lt;sup>50</sup> Health in the Americas, Volume II, the National Comorbidity Survey (NCS): by Kessler et al., 1994 for alcohol and drug prevalence

# POTENTIAL COSTS OF EXTRA POLICING TO BERMUDA

Should Bermuda introduce casino-style gaming in some form, there is likely to be some impact on the existing Bermudian law enforcement agencies. For example, additional police staff and vehicles may be necessary in order to deal with potential crimes surrounding casinos.

Under any of the scenarios developed and analyzed by The Innovation Group with respect to the potential number of casinos and their locations, it is expected that the impact on the local Bermudian Police Department would be limited. These additional costs do not take into account the need for any on-site police needs that are assumed to be absorbed by the casino operations.

According to Jean Oliver CPFA, Finance Manager for the Bermuda Police Department, the estimated cost for a police vehicle is approximately \$54,000 per car. Under a scenario whereby Bermuda would have 3-4 casino locations, the local Police would likely need to purchase a new squad car approximately every three years. It is also estimated that Bermuda would need to hire additional staff for 24 hour policing. Hourly costs for a constable approximate \$45.23/hour and sergeants hourly rates approximate \$55.30/hour.

**Approximate Costs For Additional Police Patrol** 

Unit	Amount	Frequency	Year 1	Year 2	Year 3	Year 4	Year 5
Squad Car	\$54,000	every 3 years	\$54,000			\$54,000	
Sergeant	\$55.30	24/7	\$484,428	\$496,539	\$508,952	\$521,676	\$534,718
Constable	\$45.23	24/7	\$396,215	\$406,120	\$416,273	\$426,680	\$437,347
Total Costs			\$934,643	\$902,659	\$925,225	\$1,002,356	\$972,065

# ISSUES AND COSTS SURROUNDING PROBLEM AND PATHOLOGICAL GAMBLING

There are generally believed to be three levels of problem or disordered gambling defined by the National Research Council<sup>51</sup>. No level or "0" is used for those who do not gamble at all. Level 1 gambling is considered social and or recreational gambling with no appreciable harmful effects. Level 2 gambling is synonymous with problem gambling. Level 3 gambling is synonymous with pathological gambling. Problem gambling is an urge to gamble despite harmful negative consequences or a desire to stop. It is often defined by whether harm is experienced by the gambler or others such as the gamblers family, significant other, spouse, friends or coworkers rather than by the gamblers behavior. A problem gambler may or may not be a pathological gambler. Pathological or compulsive gambling is defined as a mental disorder characterized by a continuous or periodic loss of control over gambling, a preoccupation with gambling and with obtaining money with which to gamble, irrational thinking, and a continuation of the behavior despite adverse consequences. A person is considered to be a pathological gambler if they meet five or more criteria of the ten present. Those criteria are as follows:

- Preoccupation The subject has frequent thoughts about gambling experiences, whether past, future, or fantasy.
- 2. **Tolerance** As with drug tolerance, the subject requires larger or more frequent wagers to experience the same "rush".
- Withdrawal Restlessness or irritability associated with attempts to cease or reduce gambling.
- 4. Escape The subject gambles to improve mood or escape problems.
- 5. Chasing The subject tries to win back gambling losses with more gambling.
- 6. **Lying** -The subject tries to hide the extent of his or her gambling by lying to family, friends, or therapists.
- 7. Loss of control The person has unsuccessfully attempted to reduce gambling.
- 8. **Illegal acts** The person has broken the law in order to obtain gambling money or recover gambling losses. This may include acts of theft, embezzlement, fraud, forgery, or bad checks.
- 9. Risked significant relationship The person gambles despite risking or losing a relationship, job, or other significant opportunity.
- 10. **Bailout** The person turns to family, friends, or another third party for financial assistance as a result of gambling.

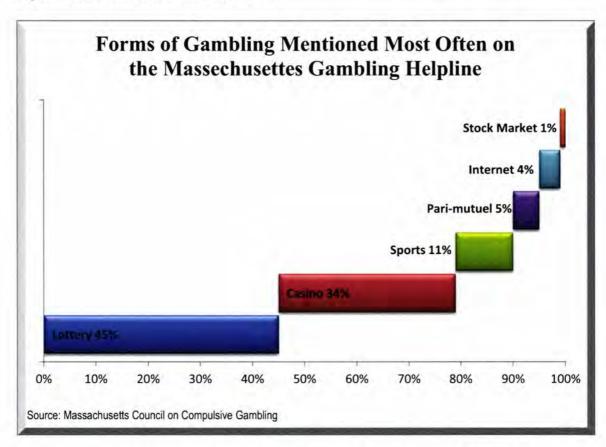
The term disordered gambling is used occasionally in this report to describe the combination of problem and pathological gambling.

## Problem Gambling In Non Gaming States

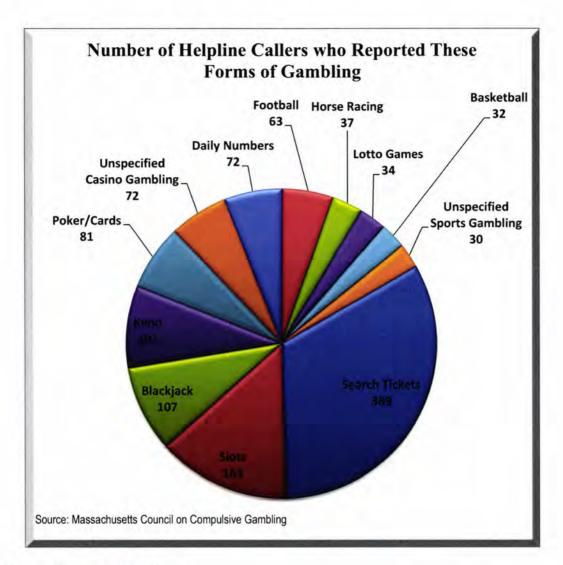
In an effort to monitor problem gambling in Massachusetts, a state without casino gambling, the Massachusetts Council on Compulsive Gambling instituted a 24-hour

<sup>&</sup>lt;sup>51</sup> National Research Council, pp. 20-21.

Helpline. Since 1989, the council has been monitoring the type of calls coming to the helpline from all gambling outposts. In FY 2007, which ended June 30, 2007 helpline calls reached 1,472. According to the Massachusetts Council on Compulsive Gambling, the lottery accounts for 45% of helpline calls followed by casino gambling with 34% of helpline calls as shown in the chart below.



Among those helpline calls, callers often mentioned more than one form of gambling during the call. The following chart illustrates the number of times each of type of gambling was mentioned.



## Prevalence Studies

Given the importance of problem gambling and its relationship to certain crime categories, it is critical to have an understanding of the proportion of the population likely to suffer from this addiction. The following presents a summary of how problem gambling prevalence rates are calculated.

Jurisdictions in several countries have conducted studies to estimate the percentage of the population that could be classified as having some level of problematic gambling behavior. These studies, commonly referred to as prevalence studies, are designed to reflect the scope and severity of problematic gambling behavior.<sup>52</sup>

One of the most frequently cited studies on prevalence rates is *Estimating the Prevalence* of Disordered Gambling Behavior in the United States and Canada: A Meta-analysis by the Harvard Medical School Division on Addictions. The meta-analysis method of

<sup>&</sup>lt;sup>52</sup> Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-analysis, Harvard Medical School Division on Addictions, 1997.

estimating prevalence rates has been used in related addiction fields of drug prevention and patterns of alcohol use and alcohol treatment and is considered a more cost-effective method than a national study since it makes use of existing research already conducted in a field.

The Harvard Medical School study, believed to be the first to use meta-analysis measurements for problematic gambling prevalence rates, analyzed 152 distinct previous prevalence studies available for review by the June 15, 1997 deadline for inclusion in the meta-analysis and determined that 2.0 percent of the adult population could be considered as Level 2 of disordered gambling (often referred to as problem gambling) and .9 percent of Level 3 of disordered gambling (also referred to as pathological gambling) during the past year.

The meta-analysis raw data was given to the Committee on the Social and Economic Impact of Pathological Gambling of the National Research Council (NRC) in its analysis for the National Gaming Impact Study Commission. After an extensive review, the NRC agreed with the above rates of problematic gambling and used the numbers in its own analysis of problematic gambling in its final report.

Determining the number of problematic gamblers is often a subject of intense debate. Even deciding what the phenomena should be called can be as problematic as determining the number who "fit" into each category.

### Prevalence Rates

Prevalence rates to determine adult problematic gambling rates are measured by administering a survey (often a variation of the South Oaks Gambling Screen or a modified DSM-IV questionnaire) to a statistically valid sample of the adult population of a state, city or other jurisdiction in which prevalence is being measured. Adolescent rates are measured in a similar manner. Such a method and analysis of data that accompanies the process is referred to as a general population prevalence study.

Rates are not static and vary by jurisdictions. For example, one study in the 1990s found that the rates were lowest in the Midwest and highest in the Northeast sections of the country. They may also vary within a jurisdiction from one period of time to another. Some are suggesting that measuring prevalence might be more valid if exposure to gambling were to be included. Though researchers are finding that prevalence rates are similar throughout the world, they have been known to vary among ethnicity.

In a 1997 clinical report of the Compulsive Gambling Society of New Zealand (CGS), NZ found a significant increase in increase in the prevalence of gambling, problem gambling and pathological gambling in New Zealand. The native Maori population exhibited prevalence rates three times that of the European population while the Pacific populations exhibited rates nearly six times the normal rates. The table below, adapted

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<sup>&</sup>lt;sup>53</sup> Cox, Sue, Henry Lesieur, Richard Rosenthal and Rachel Volberg (1997), Problem and Pathological Gambling in America: The National Picture

from Australian Institute for Gambling Research 1998, demonstrates the varying prevalence rates among various ethnic groups in New Zealand.

Prevalence Rates Among New Zealand Ethnic Groups

Ethnicity	Droblem gamblers	Pathological gamblers		
	Problem gamblers			
European	3%	2%		
Maori	9%	7%		
Pacific	16%	15%		
Asian	10%	1%		

Australian Institute for Gambling Research (1998). Study of the Social and Economic Impacts of New Zealand Casinos, Casino Control Authority, Auckland.

A number of states have done prevalence studies. The following chart is a compilation of studies over the last fifteen years. The research methodologies varied from state to state with some using a variation of the South Oaks Gambling Screen (SOGS) while others used the DSM-IV as the measurement devices.

#### Prevalence Rates of Problem and Pathological Gambling in Selected States<sup>54</sup>

State	Year of Study	Combined Problem Pathological Rates Past Year		
Arizona	2002	2.3%		
Connecticut	1996	2.8%		
Georgia	1995	2.3%		
lowa	1995	3.3%		
Louisiana	1995	4.8%		
Louisiana	1998	3.9%		
Louisiana	2002	4.6%		
Michigan	1997	3.4%		
Michigan	1999	3.2%		
Michigan	2001	2.8%		
Minnesota	1990	1.5%		
Minnesota	1996	4.9%		
Mississippi	1996	4.9%		
Montana	1992	2.2%		
Montana	1998	3.6%		
Nevada	1992	6.4%		
New York	1996	3.6%		
North Dakota	1982	2.0%		
North Dakota	2000	2.1%		
Oregon	1997	3.3%		
Oregon	2000	2.3%		
South Dakota	1991	1.4%		
South Dakota	1993	1.2%		
Texas	1992	2.5%		
Texas	1995	3.0%		
Washington	1992	2.8%		
Washington	1998	2.3%		

Without access to a gambling prevalence study in Bermuda, it was decided for this report to use the rate determined by the Committee on the Social and Economic Impact of Pathological Gambling of the National Research Council and the Harvard Medical School 1997 Meta-analysis (0.9 percent of for pathological gamblers and 2.0 percent of adults for the past-year problem gambling designation). 55

<sup>&</sup>lt;sup>54</sup> Chart prepared by looking at prevalence studies from a variety of sources.

<sup>&</sup>lt;sup>55</sup> Shaffer, H.J., Hall, M.N., and Vander Bilt, J. Estimating the Prevalence of Disordered Gambling in the United States and Canada: A Meta-analysis. Boston: President and Fellows of Harvard College, 1997, p.

## Estimated Prevalence of Problematic Gamblers for Bermuda: Adults

Given an adult population of 49,160 who are 20 and over and using the above-discussed rates, one could suggest that 442 adults in Bermuda (0.9%) are probable pathological gamblers and 983 (2.0%) are probable problem gamblers—or a total of 1,426 individual gamblers in potential need of problematic gambling services.<sup>56</sup>

**Estimated Prevalence Rates for Bermuda** 

	Prevalence (%)	Prevalence (#)
Probable New Pathological Gamblers	0.90%	442
Probable New Problem Gamblers	2.00%	983
Total Problem and Pathological Gambling	2.90%	1,426
Family Members		1,426
<b>Total People Potentially Requiring Assist</b>	ance	2,851

Source: The Innovation Group

## Comparison of Addictive Behavior Affecting Bermudians

Numerous studies suggest that substance abusers are more susceptible to gambling disorders than those who do not use substances. The National Opinion Research Center (NORC) study, for example, found the rate of alcohol or other drug abuse was nearly seven-fold greater in problematic gamblers than among non-gamblers. There are also concerns of persons in *recovery* from alcohol or drug dependence who either encounter difficulties with gambling or lose their sobriety in the gambling episodes. Given the similarities between problematic gambling behavior and other addictive disorders, it might be useful to compare the prevalence rate among similar disorders and compare the number of persons in need of services.

These other addictive behaviors are not caused by problem gambling but are symptomatic of the personality problems of the individual and are largely pre-existing conditions unrelated to gaming.

According to a 2007 study on the health of the Americas, approximately 11 percent of Bermudians indicated a strong likelihood of alcohol abuse or dependence translating to just over 5,400 people.

Prevalence Rates
(Pathological and Problem Gambling & Alcohol Dependence)

Disorder	Prevalence Rate	Estimated number of persons	
Problem and Pathological Gambling	2.90%	1,426	
Alcohol Dependence and Abuse	11.00%	5,408	

Source: Health in the Americas, Volume II, the National Comorbidity Survey (NCS): by Kessler et al., 1994 for alcohol and drug prevalence

<sup>&</sup>lt;sup>56</sup> Population figures are from Bermuda Government Department of Statistics or persons 20 and over.

Studies show pathological gambling has a strong relationship with other disorders. As Dr. Jon Grant, for example, points out that:

- 76 percent of an inpatient pathological gambling treatment sample met criteria for major depressive disorder
- 24 percent lifetime prevalence of bipolar disorder in persons with problem gambling
- 20 percent met criteria for lifetime attention-deficit hyperactivity disorder
- Problem gamblers suffer from high rates of lifetime anxiety disorders (16-40 percent)<sup>57</sup>

There have been studies that examine other psychiatric disorders in persons with pathological gambling. The table on the following page shows that pathological gamblers have the propensity for higher anxiety, substance abuse disorders, along with other disorders. Overall, 13%-78% of people who are pathological gamblers are also likely to suffer from a mood disorder. They will also report increased rates of lifetime anxiety disorders. Alcohol or drug dependence has been consistently reported with pathological gamblers. 28% of pathological gamblers had current alcohol dependence while the rate was only 1% for non-pathological gamblers. It should be clearly understood, as stated previously, that these other social problems such as personality disorders, alcoholism, or drug abuse are not caused by gambling issues but are reflective of the general addictive and personality problems of the individual expressed not only in pathological gambling but also by the presence of these other disorders which are unrelated to pathological gambling.

58 Grant, J.; and Potenza, M. Pathological Gambling - A Clinical Guide to Treatment. American Psychiatric Publishing, Inc. 2004

. .

<sup>57</sup> Jon Grant, MD presentation to Social Impact Committee of the PGATF.

Comorbid Axis I Psychiatric Disorders in Persons with Pathological Gambling<sup>59</sup>

Study	Sample Size	Assessment Method	Mood Disorders	Psychotic Disorders	Attention Deficit/ Hyperactivity Disorder (ADHD)	Obsessive- Compulsive Disorder (OCD)	Substance Abuse Disorders	Impulse Control Disorders	Anxiety Disorders	No Disorder
McCormick et al. 1984	50	RDC	76%	N/A	N/A	N/A	36%	N/A	N/A	N/A
Linden et al. 1986	25	SCID	72%	N/A	N/A	20%	48%	N/A	28%	N/A
Bland et al. 1993	30	DIS Operationalized	33%	0%	N/A	17%	63%	N/A	27%	N/A
Specker et al. 1995	40	diagnostic interview for ADHD; MIDI	N/A	N/A	20%	N/A	N/A	35%	N/A	N/A
Specker et al. 1996	40	SCID	78%	3%	N/A 40% (childhood	3%	60%	N/A	38%	8%
Black & Moyer 1998	30	DIS	60%	3%	conduct disorder)	10%	63%	43%	40%	N/A
Cunningham-Williams et al. 1998	161	DIS	MDD (9%); dysthymia (4%)	4%	N/A	1%	Alcohol (45%); illicit drugs (40%)	N/A	Panic disorder (23%); GAD (8%); phobias (15%)	N/A
Hollander et al. 1998	10	N/A	30% Bipolar disorder I & II*	*	20%	10%	Current*	N/A	N/A	50%
Hollander et al. 2000b	10	N/A	50%	N/A	N/A	10%	10%	N/A	20%	N/A
Grant & Kim 2001	131	SCID-IV	34%	N/A	N/A	0%	35%	18%	9%	N/A
Zimmerman et al. 2002	15	SCID-IV; DID; BDI	53% Mania*	*	N/A	N/A	Current*	N/A	20%	N/A

<sup>\*</sup> Excluded Condition Notes: BDI=Beck Depression Inventory; DID=Diagnostic Inventory for Depression; DIS=Diagnostic Interview Schedule, Version III; GAD=Generalized Anxiety Disorder; MDD=Major Depressive Disorder; MIDI=Minnesota Impulsive Disorders Interview; N/A=Not Available; RDC=Research Diagnostic Criteria; SCID=Structured Clinical Interview for DSM-III; SCID-IV=Structured Clinical Interview for DSM-III for DSM

<sup>&</sup>lt;sup>59</sup> Grant, J.; and Potenza, M. *Pathological Gambling – A Clinical Guide to Treatment*. American Psychiatric Publishing, Inc. 2004.

In addition, The University of Connecticut Health Center cites the following correlations with those that have been diagnosed as pathological gamblers:

- 75 percent of pathological gamblers had an alcohol disorder
- 38 percent had a drug use disorder
- 60 percent had nicotine dependence
- · 50 percent had a mood disorder
- 61 percent had a personality disorder
- 41 percent had an anxiety disorder

Past research focusing on the co-occurrence of disordered gambling and other mental health disorders has left no doubt that significant overlap exists between disordered gambling and substance use, mood, and anxiety disorders. However, research has yet to uncover how disordered gambling interacts with substance use disorders and other mental disorders. A large Canadian study<sup>60</sup> investigated this relationship in a face to face survey of 36,885 respondents. The study concluded that:

- The presence of lifetime mental disorders other than substance use disorders increased the prevalence of past-year moderate/problem gambling from 1.7% to 2.9%.
- The more severe the past-year substance use disorder, the higher the prevalence of past-year moderate/problem gambling – from 1.0-1.4% among abstainers to 9.1-9.6% among those with substance dependence.

The relationship between past-year substance use disorders and past-year gambling problems was not affected significantly by the lifetime presence or absence of other mental disorders.

From the perspective of casino gaming this co-morbidity relationship also suggests that problem gamblers are likely to be already exhibiting other disorders and are already a cost burden to society.

## Prevalence of Problematic Gamblers among Adolescents

Not to be forgotten in the delivery of services to persons impacted by problematic gambling are adolescents.

Questions about gambling were included in a 2003 survey nationwide of adolescent risky behavior by the Philadelphia-based Attenberg Adolescent Risk Communication Institute.

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Rush, B. R., Bassani, D. G., Urbanoski, K. A., & Castel, S. (2008). Influence of co-occurring mental and substance use disorders on the prevalence of problem gambling in Canada. Addiction, 103, 1847-1856.

The survey results indicated 45 percent of youth between the ages of 14 and 17 nationwide were gambling in some form on a monthly basis. The form of gambling participated in by underage gambling is not related to casino gaming where age requirements are strictly enforced but rather primarily associated with the internet and other informal gambling activities. While the survey did not measure prevalence, some items that are used in prevalence surveys were asked of the youth participants. The most frequent symptoms were: preoccupation with gambling (thinking often about gambling) and spending more money than one had planned.<sup>61</sup>

Widely respected researchers at McGill University in Montréal indicate:

Studies conducted over the past decade suggest that gambling activities remain particularly attractive to today's youth and that its popularity is on the rise amongst both children and adolescents.

Prevalence studies conducted in the United States, Canada, New Zealand, Europe, and in Australia all confirm the rising prevalence rates of youth involvement in both legal and illegal forms of gambling.

While approximately 80 percent of high school students report having gambled for money during the past year, 4-8 percent of adolescents presently have a serious gambling problem with another 10-14 percent of adolescents at-risk for developing a serious gambling problem. (Jacobs, 2000; National Research Council, 1999; Shaffer & Hall, 1996).<sup>62</sup>

A study completed in Alberta compared youths with adults and found youths were four times more likely to be at risk or be problem gamblers than adults (23% of youths vs. 5% of adults). Some explanation to the high prevalence rates includes more forms of licensed gambling in Alberta, social acceptance for underage gambling, and advertising that suggests gambling is harmless.<sup>63</sup>

## Cost Estimates to Treat Problem & Pathological Gambling in Bermuda

Illustrative of the annual burden on Bermudian social services from problem gamblers we have assumed that there is 35% co morbidity. (Based on the data presented above this is probably an underestimation). In other words 35% of the people who would be susceptible to becoming problem gamblers are already suffering other disorders and are being treated within the existing social infrastructure. We have further assumed that no more than 10% will seek help in any given year. The resultant estimate is that there will be a need to treat approximately 100 persons for gambling problems annually that either currently are not being treated for other disorders or for gambling problems associated with casinos in other jurisdictions or other forms of gambling.

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<sup>&</sup>lt;sup>61</sup>Anneburg National Risk Survey of Youth 2003: On the Path to Problem Gambling

<sup>&</sup>lt;sup>62</sup> http://www.education.mcgill.ca/gambling/en/problemgambling.htm also citing Jacobs, 2000; National Research Council, 1999; Shaffer & Hall, 1996.

<sup>&</sup>lt;sup>63</sup> Grant, J.; and Potenza, M. *Pathological Gambling – A Clinical Guide to Treatment*. American Psychiatric Publishing, Inc. 2004, also citing Wynne et al. 1994; and Wynne Resources 1998.

#### **Estimated Co morbidity Rates for Bermuda**

	Prevalence (%)	Prevalence (#)
Probable New Pathological Gamblers	0.9%	442
Probable New Problem Gamblers	2.0%	983
Total Problem and pathological gambling	2.9%	1426
Family Members		1426
Total People Requiring Help		2851
Co Morbidity	35%	998
Average seeking help per year	10%	100

Source: Health in the Americas, Volume II, the National Comorbidity Survey (NCS): by Kessler et al., 1994 for alcohol and drug prevalence

Preston Swan, Acting Director of Quality and Risk Management on the Bermuda Hospitals Board provided an assessment of the potential health care implications of gambling in Bermuda and the effect it can have on the Bermudian population based on personal research he had conducted. He notes:

These are hypothesis and assumptions that I am making based on my individual research and assessment of the local situation....this is a very difficult exercise to produce accurate numbers, but it is a useful exercise to look at potential implications if gambling was introduced to the Bermudian community.

Based on the estimated incidence of problem gambling, the additional staff required will include certified gambling counselors, Psychologist (experienced with addressing pathological gamblers), additional addiction counselors and a social worker. The estimated costs of these positions are shown in the table below.

**Estimated Staffing Costs to Mitigate Problem Gambling** 

Staffing	Approximate Salary
Psychologist	\$115,000
Certified Gambling Counselors (3 @ \$75,000 each)	\$225,000
Addiction Counselors (2 @ \$70,000 each)	\$140,000
Social Worker	\$85,000
Total	\$565,000

Source: Preston Swan, Acting Director of Quality and Risk Management on the Bermuda Hospitals Board

In addition, Mr. Swan also anticipates an increase in building costs which could range from \$200,000 to \$400,000 as additional space will be needed for staff, equipment and miscellaneous items. As the current facilities at Turning Point would not be able to accommodate the additional staff and space requirements, Mr. Swan notes, 'finding additional space or renting additional space may present a major challenge'. He suggests an additional \$50,000 to cover present staff training in assessing and screening individuals for gambling problems.

Furthermore, Mr. Swan anticipated an increase in hospital emergency room admissions for the conditions such as tachycardia, angina and cirrhosis, and additional need for

mental health services to combat increased psychiatric co-morbidities such as anxiety and depressive disorders, suicide, alcohol and substance abuse. While he did not cost out the aforementioned conditions, he does point out that additional studies may be necessary, such as estimating and potential additional costs associated with treating these conditions, to completely understand the total additional costs. Such a study would also need to account for payments made for these services through insurance or patient payments.

It has been our experience that the revenues provided by casino companies though mandated payments generally cover the cost of these programs.

## Problem Gambling Helpline

Most states in the U.S. which offer gaming provide a toll free problem gambling helpline phone number. Usually the helpline is open 24 hours a day, seven days a week. Some states staff their own helplines. Others, including Nevada and the National Council on Problem Gambling, contract with the Louisiana Association on Compulsive Gambling to answer calls from their respective toll free problem gambling helplines. Callers are assessed by trained staff and transferred to or given contact information for outpatient treatment program or support services near their communities. All calls to the helplines are confidential.

The Louisiana Association on Compulsive Gambling (LACG) contracts to provide answering of other state's helplines. They also provide a complete and detailed reporting of data collected from those who call the helpline. Contract pricing is based on several factors which might influence the expected volume of calls as well as the cost of the toll-free call. These might include information regarding:

- The number of casinos in a state/country
- The type of gaming available those casinos
- The presence of the lottery in the state/country
- Specific advertising plans for the toll-free helpline number.

The LACG was unable to disclose specific examples of pricing. One of their clients, the National Council on Problem Gambling, routes a portion of their national helpline calls to the LACG. The following table shows the expenses related to contracting the helpline services for all the calls received by the National Council helpline. In 2006, there were 236,450 calls made to this number and expenses totaled \$95,930.

#### National Council on Problem Gambling National Helpline

Source: National Council on Problem Gambling 2006 Annual Report

#### California

The California problem gambling helpline has an average cost of \$100,000 per year. This does not include administrative, material or marketing costs.

#### Connecticut

The Connecticut Council on Problem Gambling receives approximately 1,000 calls per year on their helpline. Their cost to operate is about \$100,000 annually, which includes payment to the agency that fields all the calls, our staff time in overseeing the helpline, data management and summary of statistics, advertising, and other less costly components.

Discussion with the LACG suggests that they would be happy to discuss contracting with Bermuda to answer their helpline. It is to be expected that the cost would be substantially less than those for other jurisdictions given the population differentials although this would be offset by possible increased call charges. However, in the absence of a defined contract an estimate of \$50,000 annually would not seem unreasonable.

## PROBLEMATIC GAMBLING: OTHER COSTS TO SOCIETY

Many of the social impact studies concentrate on the costs to a gaming area brought about by problematic gamblers. An Australia Productivity Commission report on gaming, for example, concluded "the principal costs for society related to gambling (costs that are not offset by benefits elsewhere) result from *problem* gambling." <sup>64</sup>

The Solicitor General of the United States came to a similar conclusion: "Many of the associated social costs to casino gambling stem from 'pathological' or 'compulsive' gambling by approximately 3 million Americans." 65

Attempts to quantify these costs may result in a wide range of estimates. The Australia Productivity Commission, for example, estimates the average yearly costs associated with a problem gambler vary over a range of \$560 to \$52,000.<sup>66</sup> The Canadian Public Health Agency reports that research suggests social costs to be between \$20,000 and \$56,000 per compulsive gambler.<sup>67</sup>

The authors of the *Wisconsin Policy Research Institute Report*, Thompson, Gazel and Rickman used a social cost survey completed by 98 members of Gamblers Anonymous and applied those rates to Wisconsin. The social costs of problematic gamblers were divided into four categories:

- 1. Employment-related costs (working hours lost due to gambling, unemployment compensation due to gambling, and foregone income due to unemployment): \$2,940.89
- 2. Bad debts and theft costs: \$3,220.00
- 3. Police and judicial-imprisonment and costs of arrest: \$2,612.34
- Health and welfare-related social costs (treatment costs, food stamps and AFDC): \$695.49.

In their survey, they estimated the total annual cost of these four categories per gambler is \$9,468.72. Based on the estimated *pathological* gambling prevalence rate of 0.9%<sup>68</sup> among Wisconsin adults, the total social costs for the entire state from the estimate of 32,425 problem gamblers in Wisconsin is \$307,023.24 from these four social cost

<sup>&</sup>lt;sup>64</sup> Australia Productivity Commission

<sup>65</sup> Greater New Orleans Broadcasting Association, Inc. et. al. Petitioners vs. United States, et. al, 1999.

<sup>66</sup> Productivity Commission (1999). Australia's Gambling Industries, Report No. 10. Canberra: AusInfo.

<sup>&</sup>lt;sup>67</sup> Democratic Reform BC, Victoria, April 28, 2005.

<sup>&</sup>lt;sup>68</sup> The percentage used by Thompson, Gazel and Rickman for pathological gamblers is the same as the percentage of past-year pathological gamblers in the National Research Council's estimates and the Harvard meta-analysis.

categories. Additional categories, the authors suggested, would increase the estimate, as would the social costs incurred by non-pathological gamblers. <sup>69</sup>

Some have expanded the categories of costs in social impact to include "medical services, mental health, lost productivity, workplace absenteeism, divorce, family breakdown, bankruptcy, social welfare, crime and legal problems and the effect on other areas of the economy and the social environment in communities".<sup>70</sup>

A 2003 paper by Collins and Lapsley examined the reasons for such large discrepancies in cost estimates as researchers have faced the inability to:

- Define private and social costs. Private costs are those born by the individual, while social costs are those imposed involuntarily on others in society as a result of the action.<sup>71</sup>
- Distinguish between private and social costs. Some researchers have found
  that it is the inability to distinguish between private and social costs that have
  led to the widespread variability of cost estimation.<sup>72</sup>
- Attribute costs that are directly attributed to gambling rather than those associated with the behavior but due to some other factor.
- Include both benefits and cost in a social cost study. Some believe that benefits must be included in impact studies.

A study by the Genuine Progress Index for Atlantic Canada and funded by the Nova Scotia Gaming Foundation observed:

There is considerably less agreement concerning gambling impact studies than in comparable work assessing the costs of tobacco, alcohol abuse, physical inactivity, and other risk factors for health and social costs. This is due partly to the complexity of the subject matter and partly to the newness of the evolving research.<sup>73</sup>

A question remains whether the public perceives problematic gambling as much of a social problem as other addictions. A report on gambling-related problems and opinions by the Ontario-based Addiction Research Foundation, for example, found that 65 percent of the respondents in a structured general population telephone survey felt that drug addiction was the most serious social problem, followed by heavy drinking (22 percent), smoking (9 percent) and heavy gambling (3 percent).<sup>74</sup>

65

<sup>&</sup>lt;sup>69</sup> Thompson, W. N., Gazel, R. and Rickman, D, Wisconsin Policy Research Institute Report 9(6) as summarized on the Wager, April 15, 1997.

<sup>70</sup> Statement by Tom Morino, political leader of the Democratic Reform BC.

<sup>&</sup>lt;sup>71</sup> Collins and Lapsley, The Social Costs and Benefits of Gambling: An Introduction to the Economic Issues, *Journal of Gambling Studies*, 19 (2), 123-148.

<sup>&</sup>lt;sup>72</sup> Walker and Barnett, The Social Costs of Gambling: An Economic Perspective. *Journal of Gambling Studies*, 15 (3), 181-212.

<sup>73</sup> The Costs and Benefits of Gaming: A Summary Report from the Literature Review, GPI Atlantic, September 2004.

<sup>&</sup>lt;sup>74</sup> Ferris and Stripe, Gambling in Ontario: A report from a general population survey on gambling-related problems and opinions as summarized in the Wager, January 7, 1997.

Without carefully defined—and widely accepted—measurements of the social costs of problematic gambling, debate will likely continue. The following section outlines various social and family impact issues related to problem gambling and the introduction of casino gaming including bankruptcy, suicide, the impact on the family, child abuse and neglect, substance abuse and comorbitity, domestic violence, divorce, and homelessness. Though substance abuse and comorbitity were discussed earlier in the report, they will be revisited briefly in the following sections. In addition, crime is obviously included in this list of important social impacts but was discussed in greater detail earlier in the report and therefore will not be revisited in the following sections.

## Social Impact Issues: Bankruptcy

One frequently debated topic in the gaming public policy debate is the correlation between problematic gambling behavior and bankruptcy. Some people incorrectly — inadvertently or otherwise—tend to link bankruptcy pathological casino gaming and accordingly to crime.

Many think that problematic gamblers misuse the bankruptcy protection afforded them by law and treat it as the ultimate "bailout." In problematic gambling, a bailout is generally defined as the problematic gambler getting money by some means that "bails him/her" out of the current pressing problems. Often it is a relative who comes up with needed cash for the "bail out".

One of the ten diagnostic criteria in the DSM-IV in determining whether one is a pathological gambler is whether he/she "relies on others to provide money to relieve a desperate financial situation caused by gambling." Instead of the gambler realizing how fortunate he/she is to have escaped major problems and quitting gambling forever, the bailout frequently has the opposite effect and can accelerate the downward path of the gambling addiction.

Robert Custer, considered one of the pioneers of problematic gambling treatment, describes the after effect of a bailout:

With the first substantial bailout, the process accelerates sharply along the downward path. Why the bailout has this effect, we do not know. It may very well be that with the bailout money in hand, and feeling immensely relieved, the gambler's despair turns to euphoria and he convinces himself that eve when he was on the brink of disaster, his 'lucky' star would not let him be destroyed... Now he will not only be able to recoup everything he has lost, he will be on the way so making the fortune he had always dreamed about. <sup>75</sup>

One trend disturbing to gambling treatment personnel and persons actively helping recovering gamblers through Gamblers Anonymous has been the tendency for gamblers to immediately return to gambling after the bankruptcy proceedings.

While this is an understudied field, an examination of calls to a problem gamblers helpline suggested that bankruptcy declarations often had little impact on out-of-control

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<sup>75</sup> Robert L. Custer and Harry Milt, When Luck Runs Out: Help for Compulsive Gamblers and Their Families, 1985.

gambling behavior. As one helpline worker remarked, "It doesn't even seem to slow them down. I've had a caller who referred to her bankruptcies by number, as in my 'first bankruptcy.' 76

There is concern by some that consumers—including gamblers—do not understand the consequences of bankruptcy proceedings. Said one veteran attendee at Gamblers Anonymous meetings: "I am often amused by the comments of some new compulsive gamblers that a 'bankruptcy declaration is really no big deal and won't affect me that much.""

Mental health counselors are concerned that gamblers will choose bankruptcy rather than counseling. Even in states like Iowa, which has a more generous and easily accessible state-funded treatment than most states, counselors report of dropouts from the counseling program who choose bankruptcy as a better alternative for their problems than counseling sessions <sup>78</sup>

Like some other areas in the debate over expanded gaming, there is conflicting data on whether bankruptcies increase in casino areas.

A U. S. Department of Treasury report presented results of its finding that "no connection between state bankruptcy rates and either the extent of or introduction of casino gambling." In preparing its analysis, the Treasury Department examined existing literature on gambling and bankruptcy and conducted new research. According to the study, much of the earlier increase in the national bankruptcy rate has been attributed to the changes in the bankruptcy law of 1978 ... and higher levels of debt relative to income, increasing availability of credit through general purpose credit cards and the reduced social stigma of declaring bankruptcy.<sup>79</sup>

A later study, however, by Creighton University professors concluded that bankruptcy rates in counties with casinos initially drop but (after a few years) then rise until they exceed the rates in counties without casinos.<sup>80</sup>

There are, of course, multiple reasons for bankruptcy filings other than gambling debts. Research by Harvard Medical and Law Schools, for example, found that approximately half of the bankruptcies in the jurisdictions selected for their study were filed because of overwhelming medical expenses.<sup>81</sup>

The chart on the following page illustrates the bankruptcy rate per 1,000 adults in each of the United States. Those states with operating casinos and slot machines are shown in red while those without are shown in blue. As the chart indicates, the states with the top three rates of bankruptcy do not even operate casinos.

77 Ibid

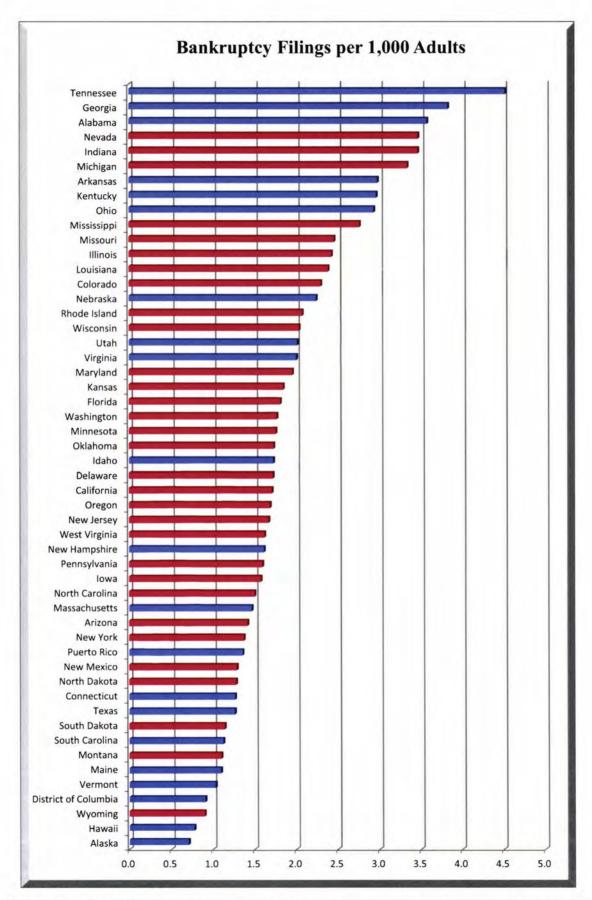
<sup>76</sup> Ibid

<sup>78</sup> Des Moines Channel 7 News, 5/5/05.

<sup>&</sup>lt;sup>79</sup> Department of the Treasury, A Study of the Interaction of Gambling and Bankruptcy, July 1999 as posted on the American Gaming Association web page, www.americangaming.org.

<sup>80</sup> Omaha World Herald, June 5, 2005

<sup>81</sup> Health Affairs February 2, 2005



### Social Impact Issues: Suicide

Another social impact issue that is a frequent topic in the debate over gaming issues is whether the incidences of suicide increase because of new gaming venues.

Like other issues involving gaming, published studies have come to differing conclusions.

This issue is more difficult to assess than some other social impact issues, for it is often impossible to make an exact determination on what was the dominant factor—or factors—leading a person to take his or her life.

Suicide is a little understood phenomenon, especially for a person who has not been impacted by someone's suicide. Yet it is the 11<sup>th</sup> highest ranking cause of death in the United States, ranking behind illnesses of heart disease, stroke, cancer, etc. and accidents, but ahead of death by assaults (homicides) and is the third highest-ranking cause in youth deaths.<sup>82</sup>

Some studies attempt to make the link between gaming and suicide because Nevada historically leads the nation in the number of suicide deaths per year. Other researchers find that to be an inconclusive cause and effect, pointing out that some other gaming jurisdictions have lower than average rates. In the 2004 American Association on Suicidology (AAS) Fact Sheet, for example, Nevada was ranked 4<sup>th</sup> in the number of suicides while New Jersey, which has had legalized casino gaming for longer than any other state outside of Nevada, was ranked 49<sup>th</sup>.

The link between pathological gamblers and suicide is much more prevalent. Attempted suicide has been reported in 17-24% Gamblers Anonymous members and other people seeking treatment for pathological gambling.<sup>83</sup> Many factors can be connected with suicides including financial difficulties, depression, and relationship problems.<sup>84</sup>

Newer gaming jurisdictions were near the national average as shown in the following chart:<sup>85</sup>

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<sup>&</sup>lt;sup>82</sup> 2005 Official Suicide Data compiled by John McIntosh, Ph.D. for the American Association on Suicidology, January 24, 2008 and available at <a href="https://www.suicidology.org">www.suicidology.org</a>.

<sup>&</sup>lt;sup>83</sup> Potenza, MN, et al: *Illegal behaviors in problem gambling: analysis of data from a gambling helpline.* Journal of Am. Academy of Psychiatry Law 28:389-403, 2000

<sup>&</sup>lt;sup>84</sup> Grant, J.; and Potenza, M. Pathological Gambling – A Clinical Guide to Treatment. American Psychiatric Publishing, Inc. 2004
<sup>85</sup> Ibid.

Selected States Suicide Rates (2005)

2005 Rank *	State	2002 Ranking	Rate per 100,000	Number 480	
2	Nevada	4	19.9		
4T	Wyoming 1		17.7	90	
11	Oklahoma	14	14.7	522	
22T	Missouri	23	12.5	727	
24	Mississippi	25	12.4	363	
27	Indiana	24	11.9	745	
32	Pennsylvania	34	11.5	1,430	
34	Louisiana	31	11.2	505	
34	lowa	35	11.2	333	
36	Michigan	32	10.9	1,108	
37	Minnesota	40	10.7	547	
41	Delaware	42T	9.8	83	
42	California	42T	8.9	3,206	
43	Illinois	44	8.5	1,086	
44	Connecticut	47	8.4	295	
50	New Jersey	49	6.1	536	
U. S. Average			11	32,637	

Source: American Association on Suicidology (AAS)

In looking at the New Jersey statistics, however, it should be noted that some researchers have found that Atlantic City has experienced higher suicide levels for both visitors and residents after gaming casinos opened.<sup>86</sup>

Another fact considered unusual by those who have studied suicide data is the higher concentration of suicide rates in "mountainous" states. The top twelve states with the highest rates for completed suicides in the last available data from the American Association on Suicidology, for example, all fell in this category: Wyoming, Alaska, Montana, Nevada, New Mexico, Arizona, Colorado, West Virginia, Idaho, Vermont, Oregon, and Utah. The highest-ranking state, Wyoming, had no casino gaming during the 2002 time frame of the statistical computation however, for the 2005 statistical computation gaming had been introduced however Wyoming fell to the fourth position tied with New Mexico.

The link between problematic gambling and suicide is destructive enough however, that the question of whether a person is considered "self-destructive" as a result of gambling is included in the "Gamblers Anonymous Twenty Questions" in helping to determine whether a person is a compulsive gambler.

Researchers in both the fields of problematic gambling and suicide are becomingly increasingly interested in the linkage between the two pathologies:

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<sup>\*</sup> The latest state ranking available. Data reflects suicides in 2004.

<sup>&</sup>lt;sup>86</sup> David Phillips, Ward Welty and Marisa Smith, *Elevated Suicide Levels Associated with Legalized Gambling*, University of California at San Diego, February 1997.

<sup>&</sup>lt;sup>87</sup>Op. cit. AAS Data.

The association between problem gambling and suicide may be more complex than commonly assumed. ... Regardless of the underlying cause, pathological gamblers appear to be a high risk population and might benefit from an assessment of both comorbid mental illness and suicide ideation at entrance to treatment. A better understanding of the interactions among illnesses might lead to more effective treatment.<sup>88</sup>

The studies and news stories of problematic gamblers taking their own lives underscores the importance of a community having effective problem gambling and suicide crisis help lines, wide publicity of their existence, and access to the facts.

## Social Impact Issues: Family Impact

Often it is said that problematic gambling—like other addictive behavior—is a disorder that impacts the entire family. Unlike alcohol addiction in which the unusual behavior of an addict can be seen by staggering steps, slurred speech, etc., a problematic gambler may not have visible physical symptoms of an addiction and thus go undetected. Although the spouse and/or parents of a gambler may know there are financial problems, they may not make the connection that the problems are related to out-of-control gambling.

Family members may have a variety of problems or illnesses related to the gambler's addiction. Studies of female spouses of male problematic gamblers, for example, show they may have a "wide range of stress-related physical problems including chronic or severe headaches, intestinal disorders, asthma and depression". 89

Less is known about the impact of problematic gambling on the male spouse of a female gambler. As the gap narrows between the number of male and female problematic gamblers, this subject needs additional attention. The twelve-step group for family members of problematic gamblers, Gam-Anon, provides information and other methods of support.

Little is known about some other family impact areas. What is the impact, for example, on an extended family when it is the grandparents who are the addicted gamblers or what is the impact when it is a teenage or college-aged gambler?

Another concern is whether children of problematic gamblers will also experience gambling problems. The National Research Council, for example, found that studies are beginning to show that pathological gamblers are more likely than non-pathological gamblers to report that their parents were pathological gamblers.<sup>90</sup>

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<sup>&</sup>lt;sup>88</sup> Newman, S., & Thompson, A. (2003). A population-based study of the association between pathological gambling and attempted suicide. *Suicide and Life-Threatening Behavior*, 33(1), 80-87

<sup>&</sup>lt;sup>89</sup> Lorenz and Yaffee, 1988 as referenced in A Research and Data Driven Guide to Pathological Gambling and Social Policy, Henry Lesieur, July 1999.

<sup>90</sup> National Research Council, p. 4.

## Family Impact: Child Abuse and Neglect

The news media is quick to publicize incidents when children are left in vehicles alone while a parent or other adult responsible for their well being is inside a casino gambling. However, research on the extent of such incidences finds conflicting results.

The National Opinion Research Center, for example, surveyed ten casino communities and found that six communities had one or more respondents who said they had seen increases in child neglect, and attributed this increase at least in part to parents leaving their children alone at home or in casino lobbies and parking lots while they went to gamble. Respondents in other communities in the same area, however, reported no noticeable increases in child abuse.<sup>91</sup>

To bring resolution to these issues, the American Gaming Association (AGA) formed a partnership with the National Center for Missing and Exploited Children (NCMEC) in order to address concerns about unattended children left alone in casino properties, and to form working solutions to combat the problem. With the help of the NCMEC, the AGA created "Guidelines for Children and Minors," and suggested standards for gaming companies to follow regarding unattended children. 92 One of the objectives is to educate parents on their responsibilities and duties when they are guests on a casino property.

The incidences of children being left home alone because the adult responsible for their care is gambling is harder to document.

What little data that is known was included in the General Accounting Office report on convenience gambling convenience gambling as it is referred to hear would be equivalent to video poker machines at clubs restaurants and bars) findings:

- In South Carolina, the number of incidents of child abuse and neglect cases after convenience gambling was legalized in 1991 decreased from 54 to 50 per 10,000 population and also decreased in Charleston County from 54 to 52 during this period.
- The number of child abuse and neglect cases per 10,000 population in Great Falls, Montana fluctuated from three in 1984 before Montana legalized convenience gambling to five in 1986, six in 1988 and back to three in 1996, the most recent readily available data.
- The number of cases *increased* in Oregon after the introduction of convenience gambling from 5.0 to 7.3 per 10,000 population in 1998. 93

Of thirteen human services agencies in South Carolina, Montana and Oregon who responded to the extent convenience gambling has had an impact on child abuse and

<sup>91</sup> National Gambling Impact Study Commission Report, Page 7-28.

<sup>92</sup> www.americangaming.org.

<sup>93</sup> GAO Report, p. 44

neglect, three indicated a great impact, five said some impact and five indicated there was no basis on which to judge. 94

Some studies indicate a long-term impact on children of problematic gamblers. Early studies by Dr. Durand Jacobs, who has had a long interest in youth gambling issues, and Lesieur and Rothschild found that children of problem gamblers are more likely to report having an unhappy childhood, being depressed and suicidal, abuse stimulate drugs, engage in overeating, have gambling problem themselves and show other signs of psychosocial maladjustments than children without troubled parents. <sup>95</sup>

Lesieur and Rothschild also found that children of pathological gamblers frequently reported feelings of anger, sadness and depression.

## Family Impact: Substance Abuse and Comorbidity

Another important issue to monitor in connection with casino-type gaming is whether the prevalence and/or incidences of substance abuse increase.

As previously discussed, numerous studies lead one to believe that substance abusers are more susceptible to gambling disorders than those who do not use substances. The National Opinion Research Center (NORC) study, for example, found the rate of alcohol or other drug abuse was nearly seven-fold greater in problematic gamblers than among non-gamblers. There are also concerns of persons in *recovery* from alcohol or drug dependence who either encounter difficulties with gambling or lose their sobriety in the gambling episodes. These other problems are less a causal effect of gambling than they are a result of a core personality problem that led them to exhibit these other disorders which also tends to bring out problems related to gambling.

In most cases these other issues and problems are present prior to exhibiting pathological gambling tendencies and can be considered an existing burden on the community unrelated to gambling.

The General Accounting Office's 2000 study on convenience gambling found that social service agencies in gaming jurisdictions with slot-type facilities had seen some impact in these areas. Nine of thirteen agencies surveyed, for example, said that the new type of gaming had either had a "great" impact or "some impact" on both alcohol abuse and drug abuse, while the remainder said there was no basis with which to judge. He should be noted that convenience gambling in this respect refers to small numbers of video poker machines located in a large number of locations, primarily bars and restaurants, providing highly convenient and unnatural gaming options for the problem gambler. This is very different than the large casinos, which are tightly monitored, that form the focus of this analysis.

<sup>95</sup> Durand Jacobs, Children of Problem Gamblers, Journal of Gambling Behavior, 5, 261-268 and Lesieur, H. R. and Rothschild, J, Children of Problem Gamblers, Journal of Gambling Behavior, 5, pp. 269-282.

96 National Gambling Impact Study Commission Report.

<sup>94</sup> Ibid.

However as part of our gaming market analysis we have explored the revenue potential for ambient machines at taverns, bars, restaurants and young men's clubs. These would fall into the convenience gambling category and therefore if the Government of Bermuda were to pursue this form of development the issues outlined in this analysis could be expected to occur.

Studies show pathological gambling has a strong relationship with other disorders. As Dr. Jon Grant, for example, points out that:

- 76 percent of an inpatient pathological gambling treatment sample met criteria for major depressive disorder
- 24 percent lifetime prevalence of bipolar disorder in persons with problem gambling
- 20 percent met criteria for lifetime attention-deficit hyperactivity disorder
- Problem gamblers suffer from high rates of lifetime anxiety disorders (16-40 percent)<sup>97</sup>

There have been studies that examine other psychiatric disorders in persons with pathological gambling. The Comorbid Axis I Psychiatric Disorders in Persons with Pathological Gambling table above illustrated that pathological gamblers have the propensity for higher anxiety, substance abuse disorders, along with other disorders. Overall, 13%-78% of people who are pathological gamblers are also likely to suffer from a mood disorder. They will also report increased rates of lifetime anxiety disorders. Alcohol or drug dependence has been consistently reported with pathological gamblers. 28% of pathological gamblers had current alcohol dependence while the rate was only 1% for nonpathological gamblers. 98

## Family Impact: Domestic Violence

It is widely believed that families impacted by a variety of addictions encounter more discord and violence than "healthy" families. Alcohol addiction, for example, is frequently mentioned as a factor in family violence.

While studies about domestic violence and problematic gambling are more rare, studies are showing that problematic gambling may influence domestic violence incidences. According to the National Research Council, studies indicate that between 25-50 percent of spouses of pathological gamblers have been abused and between 10-17 percent of their children had been abused.

Six of the ten studies in National Opinion Research Center's case studies reported an increase in domestic violence relative to the advent of casinos. 100

100 NORC.

<sup>&</sup>lt;sup>97</sup> Jon Grant, MD presentation to Social Impact Committee of the PGATF.

<sup>98</sup> Grant, J.; and Potenza, M. Pathological Gambling - A Clinical Guide to Treatment. American Psychiatric Publishing, Inc. 2004

<sup>99</sup> National Research Council

Although no longer available, for a period of time convenience gaming existed in South Carolina. Also known as ambient gaming, machines were offered in bars and taverns, fragmenting supply and distributing it throughout the state. The GAO report previously referenced found that domestic violence incidents per 10,000 population in Charleston County, South Carolina increased by 11 in the year after convenience gambling was legalized and increased by 15 per 10,000 in a survey three years after legalization of convenience gambling. In the entire state, the number of incidents of domestic violence increased by 38 per 10,000 between 1988 and 1994. There is however no evidence to directly link these increases to gambling.

## Family Impact: Divorce

Another issue frequently discussed in gaming debates is whether gaming—or problematic gambling—increases the likelihood of a couple ending a marriage in divorce. Such debate often occurs without data. There are generally a number of reasons why marriages end. The consequences of problematic gambling can be one of many such reasons or it can be the dominant, driving force in the dissolution of the household.

The National Gambling Impact Study Commission reported that it received "abundant testimony and evidence that compulsive gambling introduces a greatly heightened level of stress and tension into marriages and families, often culminating in divorce and other manifestations of familial disharmony."

In research by the National Opinion Research Center (NORC), 53.3 percent of identified pathological gamblers reported having been divorced, versus 18.2 percent of non-gamblers and 29.8 percent of low-risk gamblers. A significant number of respondents identified a spouse's gambling as a significant factor in a prior divorce.

# Family Impact: Homelessness102

Some jurisdictions with new casino-type gaming operations have indicated an increased rate of homelessness. A survey of social service officials in South Carolina, Montana, and Oregon who responded to a questionnaire on the social impact of convenience gambling, for example, showed that one-fourth of the respondents said that the new form of gambling had a great impact on homelessness while another one-fourth said there was some impact; the remaining one-half said there was no basis with which to judge.

A study of more than 1,100 rescue mission clients by the International Union of Gospel Missions in 1998 found 18 percent stated that gambling was a factor in their homelessness; a similar study of substance abusing homeless veterans found 14 percent meeting pathological gambling criteria. The National Gambling Impact Study Commission also found that a survey of homeless service providers in Chicago found that 33 percent considered gambling as a contributing factor in the homelessness of people in

102 Convenience Gambling, GAO Report, October 2000, p. 41.

<sup>101</sup> GAO Report, p. 44

<sup>103</sup> Cited by Henry Lesieur in Pathological Gambling and Social Policy Report to the Indiana Gambling Impact Study Commission, p. 31. Dr. Lesieur also reported that homeless pathological gamblers are being treated at the Moody House in the United Kingdom and in some VA Medical Centers in the United States.

their program.<sup>104</sup> It should be noted that these studies included gaming in its broadest sense, including lottery, illegal sports betting, and other forms of gaming.

Research seems to suggest that it would be important to screen homeless persons in a city's social service delivery system for problem gambling tendencies. One has to concede, however, that homelessness is a large issue with many ramifications and that problem gambling is just one part of the issue.

<sup>104</sup> NGISC, p. 7-27.

## SOCIAL IMPACT INITIATIVES

#### Introduction

After examining the social impact issues traditionally debated when a jurisdiction brings a new type of gaming into an area, it is imperative that initiatives be considered to mitigate any negative circumstances as well as to maximize the positive experience for the jurisdiction and its citizens.

In recent testimony at a legislative hearing in Texas the Executive Director of National Council on Problem Gambling testified that they are not opposed to gambling per se. he noted that there are addictions everywhere in society but what they have found is that in gaming jurisdictions that implement gaming development in a responsible way there is a recognition that a small percentage of people will have problems. In these jurisdictions the establishment of mitigation and assistance programs up front, with appropriate finding, can be minimize the impact of these problem gamblers on society.

The following section will suggest several initiatives that will be of benefit to Bermuda and its residents should casino-type gaming be introduced. These initiatives are based on the information contained herein, including interviews with public service providers and successful efforts in mitigating negative impacts.

The thematic approach in developing these particular initiatives—as well as the specific recommendations within each initiative—is minimizing the costs to government by using as many existing agencies and service delivery mechanisms as possible.

Polling data, neighborhood meetings, news stories and feedback suggests that there is some apprehension about negative consequences of adding casino gambling in Bermuda. To mitigate these circumstances, the country can engage in a number of initiatives that can minimize negative impact.

Initiatives are recommended in the following areas:

- Workplace
- Family impact
- Neighborhood
- · Faith community
- Youth
- Older adults
- · Public safety and crime prevention
- Public awareness.

Specific recommendations have been highlighted in bold print in each initiative and have been summarized at the end of each initiative section.

## Workplace Initiative

The workplace may be one of the most vulnerable for negative consequences of gaming, but it also may be one of the best sources of help.

#### Lost Time from Work or Lost a Job

Missing work or other work-related issues are included in at least three of the most frequently used gambling assessment surveys. In the Gamblers Anonymous Twenty Questions the first question, for example, is "Have you ever lost time from work due to gambling?"

In the South Oaks Gambling Screen, the question is rephrased: "Have you ever lost time from work or school or been late to work or school due to gambling or betting money?"

In the diagnostic criteria of the DSM-IV, it is grouped with other indicators: "Has gambling jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling."

Surveys using one of the three above questions show a relatively high percentage of affirmative responses as shown in this sample of research projects:

- Lesieur found between 69 and 76 percent of pathological gamblers state they have missed time from work due to gambling.<sup>105</sup>
- An Indiana survey found that pathological gamblers lost three times as much time from work (2.8 days per month) as low frequency gamblers (0.9) days.
- Between 21 and 36 percent of gamblers in treatment or GA lost a job due to their gambling.<sup>107</sup>
- The NORC study that was part of the National Gambling Impact Study Commission found pathological gamblers who had worked in the past 12 months were significantly more likely to have lost/been fired from a job than low-risk gamblers (13.8 percent versus 4 percent).<sup>108</sup>
- The NORC study also found annual costs to employers' problem and pathological gamblers.

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<sup>&</sup>lt;sup>105</sup> Research by Ladouceur, et al; Meyer, et al; and Lesieur & Anderson as summarized in A Research and Data Driven Guide to Pathological Gambling and Social Policy by Henry Lesieur, July 1999.

<sup>106</sup> Westphal, Rush and Stevens, 1998 as included in the 1999 Lesieur summary.

lbid.

<sup>108</sup> Gamling Impact and Behavior Study, p. 44.

<sup>109</sup> Ibid.

Again, it should be noted that these issues pertain to gambling in general, not just to casino gambling.

In addition to missing time from work to gamble, scientific research and anecdotal evidence indicates that both recreational and problematic gamblers participate in some form of gambling while on the job. A study in Alberta, for example, showed that 30 percent of employees had gambled at work at least once during the past year; at least onequarter had gambled weekly. 110

These statistics do not indicate what type of gambling is taking place on the job, but it can range from scratching a lottery ticket, using the office computer for Internet wagering (see our report on internet wagering in Bermuda), placing sports bets on the office telephone or on the worker's personal telecommunication equipment, shooting dice on the lunch hour (common in construction sites) or participating in what some may consider relatively innocuous office pools.

Another source of lost productivity is the distraction of employees concerned about their own gambling problem or that of a loved one. Statistical data from problem gambling help lines, for example, shows that 8-10 percent of calls are placed from the workplace, with 69 percent of those calling about their own gambling problem.<sup>111</sup>

In addition to missing work, there are workplace issues of using sick leave because of personal or family gambling problems.

Some researchers have tried to quantify the social costs of lost labor. The previously referenced Wisconsin report, for example, states:

The marginal value of a serious problem gambler's lost labor (contribution to production) due to unemployment because of gambling represents a social cost. This cost is estimated at \$1,398 per serious gambler per year, based on the length of unemployment (annual average) multiplied by the average pay in Wisconsin. For the casino problem gamblers, the cost is estimated at \$1,331.112

Others, however, have determined that quantifying such costs is too ambiguous.

#### Embezzlement/Theft

In addition to job loss or reduced productivity, the other major detriment problematic gambling brings to the workplace is that of theft of goods or money. Since the topic of embezzlement was discussed in earlier sections of this report, the focus here will be on solutions.

It is recommended that the Workplace Initiative include a document and/or presentation entitled Problematic Gambling: Employers' Guide for Employee Embezzlement and Other Types of Theft. This could have guidelines for a company adapting its own

112 Wisconsin op. cit.

<sup>110</sup> AADAC.

<sup>111</sup> E-Update publication of the Texas Council on Problem and Compulsive Gambling.

existing employer guides or policies and procedures to address problematic gambling as a threat to embezzlements or it could be a guide developed by the Bermuda Government specifically developed for Bermuda. Consultants could also create this guide.

The guide could include checklists, what signs to look for in identifying gambling-related embezzlement and thefts, resources for problematic gamblers, family members, suggested changes in policies and procedures or family members.

The document/presentations should include separate sections for different sizes of businesses or companies.

It also is recommended that a Speakers' Bureau be developed under the guidance of existing departments to make presentations to both employee and employer organizations and to individual business firms. Participants in the Speakers' Bureau could come from within government but also volunteers throughout the community.

#### **Employee Assistance Programs**

Active involvement of Employee Assistance Programs to recognize problematic gambling as a cause for presenting issues of employee/employer problems is essential in the Workplace Initiative.

There appears to be both less knowledge about problematic gambling and thus less active involvement of EAPs in problematic gambling than there is in alcohol and drug issues. In the US part of this may be driven by stringent federal government mandates on impaired employees because of alcohol and drug use and abuse but no federal mandates on impairment due to problematic gamblers.

Anecdotal data from those who have been involved with problem gambling help lines point to the U.S. Postal Service as one model of EAPs' involvement in helping employees find assistance with personal or family gambling-related problems.<sup>113</sup>

Another recommendation is for the Bermuda Government (or some other entity) to survey major employers in Bermuda to determine the number who offer employee assistance programs for their employees and, if so, whether problematic gambling is included in the scope of the program. The involvement of the Bermuda Government in the international Employee Assistance Professionals<sup>114</sup> and employer-related organizations would enhance both the survey and the initiative.<sup>115</sup>

One of the goals of the Workplace Initiative could include an effort to increase knowledge of the role of the EAP in addressing problematic gambling and/or more outreach by the EAP within a company.

<sup>113</sup> Steve Garnham (<u>steve9297@msn.com</u>) is a Philadelphia contact with the USPS.

<sup>&</sup>lt;sup>114</sup> Contacts include Deborah Owens (<u>dowens@mccus.inj.com</u>), Bert Alicea (<u>balicea@hmsincopr.com</u>) and the previously referenced Steve Garnham.

<sup>&</sup>lt;sup>115</sup> The international EAPA organization is holdings its annual conference on October 21-24 this fall in Dallas, TX. Information is available at <a href="https://www.eapassn.org">www.eapassn.org</a>.

#### **Employee Health Insurance**

By the far the most important issue in the Workplace Initiative is that of including problematic gambling in health and medical insurance benefits for both the employee and his/her family member.

The Public Sector Gaming Commission recommended in its final report that "states should at least consider making gambling treatment facilities a mandated insurance benefit." They did qualify the statement, however, by adding, "that the Public Gaming Study Commission is not making a recommendation that each state necessarily include it."

The subject of mandated benefits, however, is controversial. Many groups are against such mandates. Said the National Center for Policy Analysis:

These laws mean that if people buy insurance at all, they must purchase a bloated and expensive package of benefits designed by politicians. They are forbidden to buy insurance that reflects their own preferences, tailored to individual and family needs. Mandated benefits raise the cost of insurance and make it considerably more expensive than barebones insurance. As a result, mandates price otherwise healthy people out of the market. 117

Another group opposing mandated benefits said:

- According to one study, mandated coverage increase premiums by 8.8 percent for substance abuse, 15 percent for dental services (the most expensive mandate) and nearly 13 percent for psychiatric hospital care.
- According to another, one out of every four uninsured people has been priced out of the market by state-mandated benefits laws.

Testimony before the National Gaming Impact Study Commission touched on this subject. The following is a statement by Dr. Valerie Lorenz, a mental health professional in the Baltimore area specializing in pathological gambling treatment:

I do hope that this is something that the Commission will study very carefully and do something about, and that is the lack of health care, the lack of insurance, the problems that have been generated by managed care companies, and the lack of trained professionals who can possibly treat pathological gamblers.

Our difficulty with managed care companies at this point is about a third of our patients, perhaps, have health insurance. Most of them do not have money to pay for treatment, very rarely do the families have the money to pay for treatment, very few of them have health insurance, and if they have health insurance the managed care companies tend to deny the appropriate treatment and the amount of treatment that is necessary for adequate recovery.

Insurance companies sometimes have an arbitrary exclusion for pathological gambling, and I certainly hope that this is something that the Commission will recommend be undone. I have seen insurance

117 Ibid.

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<sup>116</sup> Gambling Policy and the Role of the State, March 2000.

policies where it specifically says that treatment for pathological gambling is excluded, (and) that needs to change.

There is the high cost of policies, restricted coverage for family members, and the denial of basic psychological testing which needs to be done on these patients. 118

In lieu of coverage specifically for the psychological disorder of pathological gambling, treatment professionals often look to other DSM-IV criteria when submitting health insurance reimbursement.

It is recommended that the survey of major employers in Bermuda that was previously mentioned be expanded to determine the extent of mental health coverage—including that for problematic gambling—in existing employee benefit packages.

Increasing Employee and Employer Awareness of Problematic Gambling As a Workplace Issue and the Availability of Resources

As mentioned throughout this document, the issue of problematic gambling behavior is not of major concern to persons until it becomes an issue in their immediate family or until they are negatively impacted by embezzlement or other criminal acts of a problematic gambler.

Therefore, it is recommended that the Public Awareness Initiative identify recommendations to increase employee and employer awareness of problematic gambling, how it can negatively impact their life and business, awareness of how to access services and awareness of the state-funded treatment program.

Recommendations: Workplace Initiatives

- Create a document and/or presentation entitled Problematic Gambling: Employers' Guide for Employee Embezzlement and Other Types of Theft.
- Develop a Speakers' Bureau under the guidance of existing departments to
  make presentations to both employee and employer organizations and to
  individual businesses using the presentation developed in the first
  recommendation.
- Survey major employers in Bermuda to identify companies who offer gambling
  assistance programs for their employees and who include problematic gambling in
  the scope of the program.
- Include the leadership of the Bermuda Chapter of the International Employee Assistance Association (EAP) in the Workplace Initiative.

<sup>118</sup> National Gambling Impact Study Commission.

- Survey major employers in Bermuda to determine the extent of mental health coverage—including that for problematic gambling—in existing employee benefit packages. Include government employees in the survey.
- Increase employee and employer awareness of problematic gambling as a
  workplace issue and the availability of resources as part of the Public Awareness
  Initiative.
- Include information on workplace issues in the Public Awareness Initiative discussed later in this document.

## Family Impact Initiative

As previously discussed in this report, there are a number of potential problematic gaming issues that can impact the family.

Issues that have emerged as family impact issues include:

- Child abuse and neglect
- Dual addiction to substance abuse and gambling
- Divorce
- Domestic violence
- Homelessness
- Bankruptcy
- Suicide

It is suggested that the Family Impact Initiative focus both on the relationship of problematic gambling to the particular topic listed above and on the available resources in each of these fields.

Equally important is that family members know how to access these resources which also becomes part of the Public Awareness Initiative.

This initiative could also include linkage with dominant, active organizations in each field to share information and data that could measure any impact of the new type of gambling in each area (divorce, domestic violence, etc.)

Leadership developed through the initiative could be presenters at conferences in each of these fields as a part of an education process how problematic gambling affects the family.

An important component of the Family Impact Initiative would be the inclusion of persons who are active in Gam-Anon, the twelve-step program for family members or close friends of gamblers.

It is important for family members to be familiar with the Self-Exclusion Program that is often part of casino enabling laws. These give a problematic gambler an opportunity to voluntary ban himself/herself from entering a casino. Some responsible gaming programs of the major casino companies have more stringent policies than many laws require.

Another partnership exists in the child abuse/child neglect area where the American Gaming Association has partnered with the National Center for Missing and Exploited Children (NCMEC) in assisting casinos with policies about unattended children. This initiative could also address the issue of children left alone at home while parents were visiting the casino. Bermuda should seek to develop a strong relationship with this program.

It is important to include bankruptcy and suicide as issues for inclusion in the Family Impact Initiative, because each has a major impact on family members.

Perhaps no group of people suffers more than that of survivors of suicide, defined as those who survive when a loved chooses to take his/her own life.

There is some anecdotal evidence that survivors of suicide are at heightened risk of developing problematic gambling behavior. 119

A part of the suicide prevention subsection of the Family Impact Initiative would include linkage and training with the current suicide prevention help lines in Bermuda about problematic gambling and updating them frequently with the problem gambling recovery resources available. Training about the connection between problematic gambling and suicide would enhance this effort.

Another essential part of the Family Impact Initiative is having available resources available when other members of the family come to them for assistance

As Dr. Jean Wright has expressed: "No treatment is effective without involving the family." No initiative will be more important to the quality of life for Bermudans than that of the Family Initiative.

Recommendations: Family Impact Initiative

 Create a Family Impact Task Force within the Bermudan government to bring together personnel from agencies with expertise in the issues addressed in this document, including domestic violence, child abuse, child neglect, substance abuse, behavioral health, domestic violence and other issues as needed.

<sup>119</sup> Sue Cox, Presentation to the American Association on Suicidology, April 2001.

- Form subcommittees, as needed, for each area to include persons from the community with expertise in each area to educate each "field" with how problematic gambling may the incidences in each of these areas.
- Develop referral resources for persons who have been a victim of domestic violence
  as a result of the batters' problematic gambling behavior and develop referral
  resources in each of the other fields as needed.
- Address suicide and problematic gambling issues by active involvement with suicide crisis lines, survivor of suicide organizations.
- Invite persons who are active in the twelve-step program Gam-Anon to participate in both the parish or government task force and its subcommittees.
- Develop a working relationship with mental health professionals between
  government professionals in this field and Bermudas marriage and family counseling
  community through its professional organization to increase knowledge and
  recognition skills of problematic gambling's impact on the family. Encourage this
  population to attend training seminars or professional conferences on problem
  gambling.
- Address child abandonment issues by studying the recommendations and programs developed jointly by the American Gaming Association and National Center for Missing and Exploited Children (NCMEC) in the US. Study their initiatives and procedures for possible inclusion in the broader community-wide public awareness process.
- Study intake forms in city agencies delivering services in the above-mentioned
  areas to see if the forms need to be changed to include problematic gambling as a
  contributory factor to the issue and change the inform forms as quickly as possible.
- Develop educational materials and referral resources for school personnel to help students whose parental problematic gambling behavior is negatively impacting their learning environment and their personal development.
- Develop educational materials and referral resources for families who have severe financial problems. Include bankruptcy information as a part of this section.
- Develop an educational program for bankruptcy lawyers, judges, and court personnel about problematic gambling.
- Assist persons active in working with the homeless population in identifying
  problematic gambling as a contributory factor in their living situation and develop
  resources as needed.

- Identify existing programs in other jurisdictions designed to help children of problem gamblers and identify or create age-appropriate resources and materials specifically designed to help these children.
- Develop methods to determine if parental problematic gambling behavior may also include substance abuse and help refer children to programs that assist children with these problems.
- Begin to benchmark data before the start-up of casinos in Bermuda to measure changes in these family-impact data collection listed above.
- Develop a contact list of specialists with expertise in family interventions for families impacted by a problematic gambler.
- Encourage intervention specialists in Bermuda who have special expertise in family and substance abuse interventions to seek specialty training in gambling interventions.
- Develop strategies to inform family members of problematic gamblers about the self-exclusion procedures.

### Neighborhood Impact Initiative

Since Bermuda comprises an archipelago of tiny islands less than 22 square miles in total land mass, in the mid-Atlantic Ocean, it is one of the most isolated places on earth, therefore the neighborhood effect is somewhat intensified as communities tend to be closer knit than a typical urban environment. Given the nature of the community in Bermuda, there are likely numerous neighborhood initiatives already in operation; therefore it seems imperative to develop strategies to combat the potential negative consequences of problematic gambling by focusing on neighborhoods.

Portions of other gaming mitigation initiatives, of course, have a close relationship with those identified with the neighborhood issues, particularly the Family Impact and Public Safety Initiatives, but there are specific things that are particularly suited to be addressed by neighborhood organizations.

One such issue is embezzlement. People who are as desperate for cash will look at any and all places to find it. Problematic gamblers whose personal ethical system does not allow them to cross the line into armed robbery or similar crimes may well abuse the trust placed in them and embezzle funds that are not theirs.

Frequently these are organizations or churches whose policies and procedures do not have strictly adhered to internal controls.

One major component of the Neighborhood Initiative is to develop an informational presentation kit on Embezzlement Prevention Strategies to present to as many

neighborhood organizations as possible. After the development of the presentation kit and strategy, it would be advantageous to form a training team that could be scheduled to make the neighborhood presentations.

A second component of the Neighborhood Initiative is to include neighborhood safety in the Public Safety/Crime Prevention Initiative discussed elsewhere in this document. There is the potential that problem gamblers may turn to crime to support a gambling habit, it is therefore important for neighborhood residents t be aware of this.

Another essential component of the Neighborhood Initiative is to promote the development of resources for problematic gamblers and their families or other loved ones with the goal of having one meeting per week in each parish for Gamblers Anonymous (GA). These meetings have to be organized and conducted by persons in GA, persons who are not gamblers cannot conduct GA meetings.

### Recommendations: Neighborhood Initiative

- Identify functions within the Ministry of Culture and Social Rehabilitation or the Ministry of Health that would be appropriate for inclusion in the Problem Gambling Neighborhood Initiative.
- **Develop an informational presentation kit** on Embezzlement Prevention Strategies for Neighborhood Organizations to present to neighborhood groups.
- Train parish leaders to make presentations using the strategies kit.
- Include neighborhood safety in the Public Safety/Crime Prevention Initiative discussed elsewhere in this report.
- Promote the development of resources for problematic gamblers and their families or other loved ones with a goal of having one meeting per week in each Parish for Gamblers Anonymous (GA).
- Promote the development of alternative support group resources for problematic gamblers and their families in each parish through a Faith Community Initiative.
- Promote the development of parish resources to help problematic gamblers and their families work through their financial problems.
- Place language and culturally appropriate problem gambling materials in parish libraries.
- Train library staff to assist library patrons to locate problem gambling resources on the Internet.

- Conduct training on problem gambling assessment and treatment for behavioral health or other parish services in recognition of problem gambling behavior and where to make referrals.
- Develop language-specific information on problem gambling identification, prevention and referral for non-English residents.

### Faith Community Initiative

The faith community can play an integral role in mitigating unwanted affects in the new gaming environment, not by in engaging in debate on the appropriateness of such a venture, but in providing leadership in establishing new avenues of help.

The Faith Community Mitigation Initiative could complement the programs already underway in the Bermudan faith based community.

There are precedents in other fields in which the faith community has taken the leadership as a community resource. There is also a wide array of faith-based models designed to meet existing human needs; among them are divorce recovery, marriage and family enrichment, prison ministries and substance abuse recovery.

### Recommendations: Faith Community Initiative

- Develop a gambling-specific faith community curriculum for use in simulated recovery groups.
- Place language and cultural appropriate problem gambling recovery materials in the religious institution's library or other educational dissemination systems;
- Train religious leaders in methods to help problematic gamblers and their families including providing appropriate referral resources in their community;
- Train the members of the faith community in mentoring youth who are impacted by their caretakers' gambling problems;
- Offer to be the host site for Gamblers Anonymous groups.
- Include problem gambling issues in congregations who are currently using Divorce Recovery or Celebration Recovery programs;
- Expand existing substance abuse ministries to include problematic gambling;
- Develop recreational alternatives for people in recovery who can no longer participate in the gaming venues;

- Identify counselors within pastoral care ministries who also have expertise in problematic gambling issues or conducting educational trainings for these ministries.
- Develop a presentation kit on protecting the church, temple, mosque or synagogue from gambling-related embezzlements and theft.
- Engage community religious leaders in the development of this initiative.

### Youth Initiative

Youth are impacted by problematic gambling both by personal addictive gambling behavior and that of family members.

While the dangers of youth participation in alcohol and drug use is well documented, comparatively little attention has focused on youth gambling. As discussed in an earlier section of this report, however, the rate of problematic gambling is higher among young people than it is in other age groups.

Even with the high visibility of substance abuse and other mental health issues impacting youth, identification of impaired youth—and to a less extent—access to services is somewhat limited for youth with these disorders or other mental health problems as reported by the Annenberg Public Policy Center of the University of Pennsylvania:

Although depression and other mental health conditions are major sources of risk for high school aged youth, professionals report that most schools do not have clearly defined procedures for identifying students with these problems so that they can be referred for treatment or counseling either at the school or in the community. Only 34% of high school professionals reported that their school had a "clearly defined and coordinated process for identifying students who may have a mental health condition." Although most high schools did have such a process for referring students with mental health conditions to appropriate providers of care (66%), without a process for identifying students in need of help, most are likely to remain unrecognized. 120

Even more disturbing to many is that recognition of youth gambling as a health disorder is so low that it is not even mentioned in research projects on adolescent mental health such as the one described in the Annenberg report.

Although gambling has been a popular activity for generations of youth worldwide, the recent poker craze appears to have accelerated that popularity.

Some mental health professionals are alarmed that that popularity may grow with advertisements by major retail outlets advertising gambling-type games for youth. Toys R Us, for example, advertised on its Web site a PlayStation World Championship Poker game with a recommended age of 5 to 20 years and a Caesar's Palace set of 500 poker chips for a recommended age of 8 and up.

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<sup>&</sup>lt;sup>120</sup> Annenberg Public Policy Center (APPC)

Also of concern is a finding in the National Gambling Impact Study Commission summarized that "the available evidence indicates that individuals who begin gambling at an early age run a much higher lifetime risk of developing a gambling problem." <sup>121</sup>

Because of these considerations it is recommended that the Youth Initiative receive a high priority in Bermuda.

Youths in Bermuda may also benefit from a youth oriented website possibly overseen by the Bermudan Government.

The Youth Initiative should include strategies to assist youth with parental gambling problems—both in the recognition and seeking assistance.

#### Recommendations: Youth Initiative

- · Conduct a literature review on the relevant data on adolescent gambling.
- Conduct a literature review on the relevant data on the impact of parental gambling on children's mental and physical development.
- Identify existing resources for young children of problematic gamblers.
- Identify research institutions and individual investigators in Bermuda with expertise and interest in youth addiction issues and invite their participation in youth problematic gambling mitigation efforts;
- Identify programmatic materials that are designed for young children whose parent or parents are problematic gamblers.
- Educate student assistance professionals, counselors and other school personnel
  on both the problems of youth gamblers and of youth whose parents are problematic
  gamblers.
- Survey successful youth prevention programs and curriculum in the United States and in the Carribean.
- Consider purchasing or developing youth mitigation curriculum and other materials for use in schools and youth groups.
- Develop a gambling problem prevention program for college students, including casinos' underage gambling policies, laws on underage gambling, and illegal gambling in sports betting.

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<sup>121</sup> National Gaming Impact Study Commission, p. 4-12.

- Develop an awareness and prevention program and age appropriate materials on Internet wagering and poker games for all youth (young children through college age.
- Educate students, administrators, teachers and other school personnel on school
  policies of gambling at school.
- Review referral policies for students who violate school gambling policies.
- Develop curriculum for programs for those who violate school gambling policies.

### Older Adult Initiative

The subject of older adults and casino-type gambling is receiving seemingly more and more attention, both by researchers and the media, but like many other areas of problematic gambling, the results are mixed.

In a discussion on the health correlates of recreational gambling and older adults published in the *American Journal of Psychiatry*, for example, researchers found that:

Older adult gamblers were more likely than younger adult gamblers to begin gambling later in life, to gamble more frequently, and to report a larger maximum win. Recreational gambling patterns of older adults differ from those of younger adults. In contrast to findings in younger adults, recreational gambling in older adults is not associated with negative measures of health and well-being. 122

A University of Pennsylvania researcher, Dr. David Oslin, found that 70 percent of seniors who responded to his survey indicated they had gambled in the past year. Said Dr. Oslin: "I wouldn't have thought it was quite that high." Of that number, 11 percent were identified as at-risk gamblers." <sup>123</sup>

Few question that gambling by older adults in general, and casino gaming in particular, is popular. A study by Harrah's, for example, shows that adults older than 66 make up more than a quarter of casino goers. 124

The Florida Council on Compulsive Gambling lists reasons why this age group finds gambling such an attractive pastime:

- Many seniors have disposable incomes.
- Some have limited financial resources or are looking for that big payoff to compensate an ever-shrinking limited retirement income.
- Opportunity and availability for elderly to gamble.

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<sup>122</sup> Am J Psychiatry 2004; 161:1672-1679)

<sup>123</sup> Julie Sturgeon, www.bankrate.com, 2/28/05

<sup>124</sup> Chicago Tribune, 3/20/2005

- Some are bored with lots of time on their hands after retirement: they may be widowed, lonely, or have feelings of oppression.
- Some are lonely, have lost a spouse, close friends, or recently moved to the area from other locations, leaving family and friends behind.
- Seniors are subject to limited alternatives for socializing, often due to availability or physical restraints.
- Seniors are subject to peer pressure and some are just looking to be with their peers in an exciting and fun activity.

An 81-year old casino visitor may have summed up some of the reasons for this age group's finding the casinos an inviting venue: "It's an opportunity to be around other people. You're treated well. The parking lots are well lit. The marketing is very friendly to seniors. The people at the casino learn and call you by name. It can be a nice feeling. 125

A task force of the National Council on Problem Gambling drafted an issue paper indicating its concerns with older adult gambling:

- Senior citizens represent the fastest-growing age group in America.
- The National Gambling Impact Study Commission found recently that American seniors who recently gambled jumped from 20 percent in 1974 to 50 percent in 1998, a surge unmatched by any other age group.
- Advocates have expressed concerns about senior gambling based on seniors' fixed incomes, social isolation, and declining health;
- In general, seniors may be more reluctant to reach out for help than other groups, especially regarding gambling problems.
- Debt and other consequences can rapidly spiral out of control while seniors and their loved ones deal with the denial, stigma and shame.

There are sufficient concerns about older adult gambling to mount an aggressive older adult problematic gambling mitigation effort.

#### Recommendations: Older Adult Initiative

- Conduct a literature review on the relevant data on older adult gambling.
- Review polling data to determine the likelihood of older adult participation in casino gaming.

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<sup>125</sup> Lawrence, KS Journal World, 4/20/2005

- Study the polling data to identify any significant differences among demographic groups among older adults that might forecast a need for services.
- Identify successful older adult problem gambling prevention programs in other jurisdictions.
- Work with casino operators in helping convey responsible gaming messages to older adult gamblers.
- Include older adult prevention messages in the Public Awareness Initiative.
- Identify government services that can be of assistance in the Older Adult Initiative.
- Adapt prevention and treatment modalities to meet the needs of older adults.
- Develop specific recovery group models for this age group.
- Develop educational materials for adult children of older gamblers to help them
  identify problematic gambling behavior or to deal with the consequences of the older
  adult's problematic gambling.
- Develop or purchase materials on older adult gambling for providers of other adult services to understand the impact the older adult's problematic gambling can have on the service area of the service provider.
- Assist credit counselors and other financial advisors with educational information on older adults and problematic gambling.
- Include older gamblers in the Faith Community Initiative.
- Include older adult gamblers in the Family Impact Initiative.
- Develop a speakers' bureau on older adult gambling for community presentations; include recovering older gamblers and family members of recovering older gamblers in the list of available presenters.
- Include information about older gamblers in city libraries for families and/or older gamblers.
- Develop a list of best practices for older gambler prevention and treatment programs.
- Develop a contact list of intervention specialists with expertise in family interventions with older adults.

### Public Safety and Crime Prevention Initiative

As discussed previously in this report, one of the most important issues of concern was that of crime.

To mitigate both the citizens' concerns about crime and to mitigate increased crime occurrences that are related to gaming or problematic gambling behavior, it is essential to implement an effective Public Safety and Crime Prevention Initiative.

### Recommendations: Public Safety and Crime Prevention Initiative

- Collect data to measure mitigation effects.
- Include benchmarking the number of crimes in selected categories to measure changes after operations begin in Bermuda.
- Assemble and maintain an accurate data collection from comparable gaming jurisdictions.
- Monitor changes in crimes by parish and continuing to monitor crime statistics on a long-term basis to measure success of the gaming-related crime mitigation efforts will be essential:
- Increase a law enforcement presence in the casino areas.
- Encourage a close working relationship between security personnel at the casino properties and the city's law enforcement personnel.
- Increase a law enforcement presence in neighboring residential areas.
- Monitor increases in emergency services related to gambling. Emergency services
  include a wide array of significant incidences at casinos such as panic attacks by
  gamblers, medical emergencies due to gamblers failing to take their meds, cardiac
  episodes brought upon by increased stress and other similar significant incidences.
- Continue to emphatically enforce illegal gambling sanctions.
- Provide accurate data information in fact sheets on gambling and crime.
- **Develop a speakers' bureau** to share information on any anti-crime initiatives employed by the Government of Bermuda as it relates to casino gambling.
- Study government services to determine costs for additional personnel and other issues needed to implement this initiative.

- Involve the Ministry of Culture and Social Rehabilitation or the Ministry of Health of Bermuda in this initiative.
- Keep the ministries fully informed of the work of this initiative.
- Build community collaborations by enlisting the media in conveying an accurate message about crime and the new type of gambling.
- Maintain a crime prevention page on issues related to gambling on the government's or casino operators Web site.
- Develop a speakers' bureau to discuss gambling-related crimes and/or relationship of crime and the new casinos.
- Review some of the more innovative initiatives in varying jurisdictions in addressing problematic gambling behavior and crime. Specifically, it is suggested that the model of gambling therapeutic treatment courts in Amherst, New York should be considered if the government wants to discourage reoccurrences of crimes by problematic gamblers or the diversion system developed by the Attorney General of Louisiana to redirecting problematic gambling criminals from the criminal justice system into the state's treatment program. Minnesota state laws mandating problem gambling assessments for certain categories of crime also should be studied to see if such would be of benefit in Bermuda.
- Work with government officials to adopt changes in the law to adopt innovate innovations on problematic gambling behavior or responsible gaming practices throughout Bermuda.
- Make the Public Safety/Crime Prevention Initiative an integral part of the Public Awareness Initiative.
- Ensure that the casinos themselves have their own security and crime prevention programs as part of their operations and as a condition to holding a license

### Public Awareness Initiative

An ongoing public awareness initiative will be necessary to inform Bermudans of responsible gaming behavior to avoid problems regarding this social activity and to appraise them of resources available for a personal problematic gambling behavior problem or that of a loved one.

Public awareness is one of the concepts of what is called "responsible gaming practices" as casino companies, state lotteries, racetracks and other gaming entities attempt to inform the public of what constitutes responsible gaming and how to reach available resources if problematic gambling behavior surfaces.

Harrah's Entertainment was the first casino company in the United States to address responsible gaming when it began Operation Bet Smart and Project 21 in the early 1980s. Since then, nearly all major casino companies as well as state lotteries and some racetracks establishments have materials that promote the concept responsible gaming.

Most casino companies have extensive information on responsible gaming on their Web sites and distribute materials in various methods throughout their properties.

Awareness and prevention programs are of no avail, however, if the public does not know about them. It is suggested, therefore, that a major Public Awareness Initiative be developed and carried out to inform Bermudans of how to avoid problem gambling problems and what to do if these develop.

An equally important component of this initiative will be the development of resources on problem gambling—both within the public structure and among private entities. Some areas needing further resource development are described elsewhere in this report.

It should be the goal of this Bermudan Public Awareness Initiative that each person in need of prevention, awareness or assistance concerning problematic gambling behavior or promotion of responsible gaming practices will have some person or place in which to turn for assistance and will know how to access that help and that the amount of negative consequences to the citizens can be mitigated through execution of these initiatives.

#### Recommendations: Public Awareness Initiative

- Review public awareness initiatives of US states and of Caribbean islands.
- Review public awareness initiatives of other jurisdictions worldwide.
- Adopt best practices of other jurisdictions.
- Prioritize which demographic groups are most in need of a public awareness message.
- Determine which is the most important message to the target population in each of these seven other initiatives.
- Enlist help from government personnel or volunteers from the community to craft the most effective message for the target population in each initiative.
- Develop a long-range plan for executing of a public awareness initiative.
- Determine funding levels for a public awareness initiative.

- Determine how to translate the public awareness message in languages specific to target populations.
- Determine the best usage of the government's (or casino operators) Web page to deliver targeted messages to the Bermudan population.
- Work with the casino company public relations departments in program design of the Public Awareness Initiative.

### Conclusion

A number of suggestions have been made for initiatives that can mitigate any potential negative consequences of casinos in Bermuda.

The recommended actions are intended to be cost-effective through development by Bermudan staff and consultants. These initiatives can be furthered strengthened by public input and policy development through the normal government policy channels.

Bermuda can set an example on how the addition of casino gaming can both enhance the recreational opportunities of casino gaming without disrupting the lives of individual citizens nor mar the positive image of Bermuda.

# CONCLUSIONS ON SOCIAL/OTHER IMPACTS

In general these impact tend to be small and are offset by the positives (see the economic impact section). Most of the negatives can be controlled and minimized by the right planning and finding of appropriate agencies and programs.

The following lists some of the primary conclusions and impacts developed in this section of the analysis.

### Crime

It can be concluded that while the number of crimes reported on-site at casinos in Bermuda may likely increase, overall crime rates will likely decline when additional visitation attributable to the introduction of gaming is accounted for. There is no evidence that supports large increases in major crimes within the adjacent casino neighborhoods. These crime related impacts are generally very small and are largely controlled by the provision of sufficient on-site security by the casinos, and supplemental police patrols in the surrounding neighborhoods. With these measures in place major criminal activity can be minimized and increases in crime can be effectively eliminated.

Other activity related to public disorder, traffic violations, DUI, etc. may increase but no more so than any other entertainment venue which attracts large numbers of visitors. Cheating in the casinos, passing bad checks are two other unique areas where arrests are likely to occur. For the most part these impact only the casino, and are largely dealt with through casino security, surveillance and credit departments, with local or police only called in to make the arrests when appropriate.

We believe that in jurisdictions where sufficient on site security is provided and supplemental police patrols provided in the surrounding neighborhoods, that major criminal activity can be minimized.

Based on the available research, actions that will help prevent crime include the following:

- Ensure a prominent level of security off the premises provided for by casino sponsored additional police patrols in the local neighborhoods
- Ensure that the casino has more than adequate on-site security in the building and especially within the parking lots or garages.
- · Pro-active monitoring of problem gambling at the facility
  - o Self-exclusion programs are becoming standard industry practices
- Develop an information package to address citizens concerns regarding the true facts in relation to casinos and crime.
- Recommend that the current crime reporting system be reviewed such to ensure that it
  will adequately capture and identify casino related crimes.

Under a scenario whereby Bermuda would have 3-4 casino locations, the local Police would likely need to purchase a new squad car approximately every three years. It is also estimated that Bermuda would need to hire additional staff for 24 hour policing. Hourly costs for a constable approximate \$45.23/hour and sergeants hourly rates approximate \$55.30/hour.

**Approximate Costs For Additional Police Patrol** 

Unit	Amount	Frequency	Year 1	Year 2	Year 3	Year 4	Year 5
Squad Car	\$54,000	every 3 years	\$54,000			\$54,000	
Sergeant	\$55.30	24/7	\$484,428	\$496,539	\$508,952	\$521,676	\$534,718
Constable	\$45.23	24/7	\$396,215	\$406,120	\$416,273	\$426,680	\$437,347
Total Costs			\$934,643	\$902,659	\$925,225	\$1,002,356	\$972,065

Typically these are not costs borne by the jurisdiction but are funded through gaming taxes on casino operators.

## Problem Gambling

Crimes relating to problem gambling have been held to represent the predominant impact on crime from casino developments. However, it should be noted that the proportion of the population classified as problem gamblers is very small at 2% while those classified as pathological gamblers, from which many of the crime and social problem subsequently originate are no more than 0.9% of the population. In addition many of these pathological gamblers also exhibit other social problems such as personality disorders, alcoholism, or drug abuse which are not related to problem gambling but are symptomatic of the personality problems of the individual. It should also be noted that the prevalence of pathological and problem gambling is significantly lower than that for other problems such as alcoholism. In most cases these other issues and problems are present prior to exhibiting pathological gambling tendencies and can be considered an existing burden on the community unrelated to gambling. So while individually the problems outlined in this report can be a serious issue for the individual and health and law enforcement officials attempting to address them the overall incremental impact on the community as a result of the introduction of gaming is very small as are the number of crimes committed by problem gamblers that can be laid squarely at the door of gambling addictions. This point is illustrated by the lack of notable increases in criminal activity overall as a result of the introduction of casino gaming in the numerous jurisdiction cited in this report.

The proliferation of internet access has already provided access to internet gambling and pathological gamblers are in all likelihood already displaying the problems to society noted above. In the absence of casino gaming there is no mechanism to identify them and to provide the resources needed to treat these individuals.

Based on the estimated incidence of problem gambling, the estimated cost to provide counseling is shown in the table below.

**Estimated Staffing Costs to Mitigate Problem Gambling** 

Staffing	Approximate Salary	
Psychologist	\$115,000	
Certified Gambling Counselors (3 @ \$75,000 each)	\$225,000	
Addiction Counselors (2 @ \$70,000 each)	\$140,000	
Social Worker	\$85,000	
Total	\$565,000	

Source: Preston Swan, Acting Director of Quality and Risk Management on the Bermuda Hospitals Board

In addition, Mr. Swan also anticipates an increase in building costs which could range from \$200,000 to \$400,000 as additional space will be needed for staff, equipment and miscellaneous items.

We estimate that in addition the cost to address all the mitigation efforts identified in this report will not exceed \$500,000 Bermudian dollars annually.

The establishment of a Problem Gamblers Hotline is estimated to cost on annual basis \$50,000.

## Costs and Funding for Mitigation Efforts

Total Costs for all of the above are estimated in the table below.

Estimated Total Costs for Mitigation of Negative Impacts from Casino Development

- A	Approx Annual Cost	Capital Cost
Policing Costs	\$1,000,000	\$54,000 for Squad car every three years
Mitigation Programs	\$500,000	
Problem Gambling Treatment Costs	\$565,000	\$200,000-\$400,000-Additional office space
Problem Gambling Hotline	\$50,000	
Total	\$2,115,0	00

The funding for policing typically comes from taxes levied on the gaming revenue of the casinos. Funding for problem gambling related programs is usually funded through a legislated levy on casino operators which has typically been 1% of gaming revenues. In Bermuda under some of the scenarios this percentage may have to increase to as high as 2% due to the relatively low revenue potential of the market and the scenario under consideration.

# Section VII: Economic Impacts

# ECONOMIC IMPACT OF GAMING IN BERMUDA

### Introduction

The previous analysis of the Bermuda Gaming Market and the development of Pro Forma Operating Statements for selected development scenarios provide the basic inputs for an assessment of the potential economic impacts of gaming on Bermuda. This section of The Innovation Group's study provides a quantitative analysis of the range of possible impacts on the country's economy. To avoid redundancy, the economic impacts have been developed for three of the possible development scenarios which are believed to be representative of the different deelopemnt possibilitites for casino style gaming. From these three scenarios the impacts from the other scenarios analyzed can be extrapolated although it should be noted that the economics of casino gaming are such that the economic impacts from several of the scenarios analyzed are unlikely to be realized to their full extent. For example, a scenario whereby casinos are allowed in all hotels, large and small, creates an operational environment and cost structure that may be prohibitive rsulting in fewer casinos actually being developed and consequently the economic benefits are not fully realized. The scenarios selected for the analysis of economic impacts were:

- Scenario 1 which includes a single stand-alone casino in Hamilton.
- Scenario 2 which includes stand-alone casinos in Hamilton, the Dockyard and St. George.
- Scenarios 4 which includes casinos only at major hotels which are defined as including those facilities with over 100 rooms and includes Elbow Beach, Fairmont Southampton, Fairmont Hamilton, Grotto Bay, Newstead Belmont, Tucker Point and the proposed Hyatt.

The selection of these particular scenarios was done in order to provide a representative sample of the three basic concepts for casino development. The first concept is one of a centrally located casino in Hamilton (as in Scenario #1), the second concept analyzes three casinos serving the central, eastern and western portion of the island thereby serving visitor and local populations in these areas (as in Scenario #2), and finally a concept which allows the development of casinos at major hotels throughout the island, (Scenario #4). The remaining scenarios in the casino revenue analysis aspect of our work are basically combinations or hybrids of the above three concepts.

The economic impacts presented in this analysis fall into four general categories which are:

- The impacts of spending from new tourists induced to visit Bermuda by the presence of casino gaming. These are impacts that will be realized on an annual basis.
- 2. Spending by the casinos in the local economy in the form of employment, salaries and spending for goods and services to support operations on an annual basis.
- 3. Economic impacts from one time construction spending to develop the casino properties. In effect these expenditures have a onetime impact.
- 4. The impact on the lodging industry in terms of incremental room demand and additional room revenues. This aspect is to a large degree incorporated within impact areas #2 above. The goal in this analysis is to extrapolate the specific impacts on the lodging industry which is a key component to the overall economic welfare of Bermuda's economy.
- 5. A summary of a other economic impacts.
- 6. A discussion of the likely impact on other local businesses.

The following sections of this report address each one of these impacts in sequence.

## Economic Impact from Induced New Visitors

The assessment of the impacts associated with induced tourist visitation and relates to the spending in the economy for lodging, food and beverage, entertainment, retail transport, telecom and other leisure related activities by tourist or visitors induced to come to Bermuda by the advent of casino gaming. The number of induced or new visitors is projected in the Gaming Market Assessment and is presented below in the following table.

New Tourists Visitors Induced by Gaming Development

	Scenario 1	Scenario 2	Scenario 4	
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels	
Induced Trips	53,325	62,888	89,125	
Junket Trips	4,752	5,940	7,128	
Total New Trips	58,077	68,828	96,253	
Room Nights from Induced + junket	96,794	114,713	160,422	

Source: The Innovation Group

These new visitors will have a series of expenditures associated with their stay on the island. For the purposes of this analysis we have assumed that these spending patterns will be similar to those of existing air visitors to the island as represented in the Air Arrival Exit Study conducted by the Bermuda Department of Tourism.

Expenditures per Person per Day 2008 and 2011

Expenditures for :	2008	2011
Accommodation	\$108	\$121
Shopping	\$44	\$49
Meals	\$5	\$6
Bar	\$8	\$9
Other Leisure and recreation	\$9	\$10
Transport	\$10	\$11
Telecom	\$3	\$3
Length of Stay	3	
Person Per Room	1.8	

Source: Air Arrival Exit Study Summer 2008, Bermuda Department of Tourism

These daily expenditures are then multiplied by the estimated number of days the induced tourists would stay. In the case of Bermuda three days has been estimated as the average length of stay for this segment of visitors based upon historical information. The resultant total spend by scenario is shown in the table below.

Total Spending by Induced Visitors by Scenario

	Scenario 1	Scenario 2	Scenario 4
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
Accommodation	\$38,099	\$45,152	\$63,144
Shopping	\$15,522	\$18,395	\$25,725
Meals	\$1,764	\$2,090	\$2,923
Bar	\$2,822	\$3,345	\$4,677
Other Leisure and recreation	\$3,175	\$3,763	\$5,262
Transport	\$3,528	\$4,181	\$5,847
Telecom	\$1,058	\$1,254	\$1,754
Total Spending	\$64,910	\$76,926	\$107,579

Source: The Innovation Group

This spending data was then utilized as the key input into an Input-Output Model developed for The Bermuda Department of Tourism (BDOT). The Innovation Group obtained this model and utilized it to provide a more accurate accounting of the flow of tourism dollars through the Bermudian economy. The Input-Output Model was presented to the Bermuda Government in 2004, and remains the property of the Bermuda Government. A brief description of the development of the input-output model and he definition of the various terms are presented in Appendix A of this report.

The following key definitions are used in this report:

**Direct Effect** - measures the income received in the Bermuda economy by computing the wage bill in each industry that directly supplies the visitor expenditures. For example, for every one million dollars in visitor expenditures on accommodations, some portion is

paid out as wages and salaries to those employees working directly within the accommodation industry.

Indirect Effect - measures that additional portion of the accommodation expenditures that are paid out to domestic suppliers to the accommodation industry - business services, dry cleaning, etc. Technically, the indirect effect includes all supplier rounds (i.e., suppliers of suppliers, etc.). The present version of the Input-Output Model only includes the first round suppliers. This is an unavoidable limiting factor given the absence of other complete multipliers and results in what is likely to be an underestimation of the overall economic impact. The indirect suppliers also employ labor and pay wages.

**Induced Effect** - households that receive income from the direct and indirect effects then re-spend the majority of the money in the local economy, thereby creating further income as the household expenditures pay the wages of retail workers, etc

The following table presents the results of the analysis for Scenario 1.

Scenario 1 Economic Impact From Induced Visitation (in 000 000's of \$)

111 000 000 8 01 3	P)	
Scenario 1	Scenario 2	Scenario 4
1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
\$29	\$35	\$48
\$18	\$22	\$30
\$16	\$19	\$27
\$64	\$75	\$105
\$10	\$12	\$16
\$3	\$3	\$4
\$5	\$6	\$9
\$18	\$21	\$29
	70.	
\$63	\$75	\$104
\$13	\$15	\$21
\$14	\$16	\$22
\$37	\$44	\$61
	\$cenario 1  1 Casino Downtown Hamilton  \$29 \$18 \$16 \$64  \$10 \$3 \$5 \$18  \$63 \$13 \$14	Scenario 1         Scenario 2           3 Casinos-         1 Casino Hamilton, Dockyard, St.           Hamilton         St.           Georges         \$29           \$18         \$22           \$16         \$19           \$64         \$75           \$10         \$12           \$3         \$3           \$5         \$6           \$18         \$21           \$63         \$75           \$13         \$15           \$14         \$16

A description of the various categories of impacts is provided below.

#### Income

Tourist expenditures provide revenue to those business establishments that trade with tourists (e.g. hotels, restaurants, bars, shops, transportation, etc). Such revenue is then utilized by these businesses to supply the necessary inputs to ensure the future success of the business, such as to replace goods sold to tourists or used up in the process of production, to pay wages and salaries, to pay rent and dividends, and to pay taxes, duties and license fees to the government. Thus, the money received by tourists is re-spent by businesses directly associated with the tourist industry throughout a series of transactions (which can be described as the "multiplier" effect). Each transaction is one step removed from the original tourist dollar, and eventually the money leaks out of the system at various stages, namely when it is used to purchase imported items, or put into savings. Each round of transactions creates income for Island residents.

Thus direct income effects are those caused by the initial impact of visitors spending; the indirect effects are those caused by subsequent rounds of business expenditure resulting from the initial expenditure; and the induced effects are the additional effects caused by households re-spending the incomes which they have earned from the direct and indirect effects plus the induced effects themselves.

#### Public Sector Revenues

The same approach was used to calculate the contribution made by tourism to public sector (e.g. government) revenue. The model uses "effective" tax rates. An effective tax rate is not the published rate but a calculation of a rate that would include tax concessions or exemptions. An example of this would be payroll tax, the published rate being 13.5% for one payroll group, 9.75% for another group and so on. This type of structure makes it difficult to assess the fiscal impact of payroll unless the payroll information by group is known. To allow for the various rates and concessions/exemptions, the effective payroll tax rate is calculated by dividing government payroll tax revenue in the latest year by total personal income for the same year, thus yielding an effective tax rate.

#### Balance of Payments

To provide the necessary inputs to the system to support tourism, however imports are required by those organizations directly and indirectly associated with the tourism industry.

#### **Employment**

The estimation of jobs presented in the table below is not part of the model output but was derived by The Innovation Group from the model outputs as it relates to income. We utilized the median income of Bermudians in the tourism sector of about \$50,000<sup>126</sup> and then inflated this figure by about 5% per annum to arrive at a 2011 average salary of approximately \$58,000. This figure was then divided into income in the above tables to derive estimates of direct, indirect and induced jobs as a result of the induced tourism as a result of the advent of gaming. The resultant jobs produced by each scenario are shown in the table below.

**Induced Visitation From Gaming Job Impacts** 

	Scenario 1	Scenario 2	Scenario 4
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
Direct	503	596	833
Indirect	317	376	525
Induced	278	330	461
Total	1,098	1,301	1,819

#### Conclusion

It is clear from the above tables that Scenario 4 provides the greatest benefit to the economy in terms of jobs, income and public sector revenues, while Scenario 1 provides the fewest benefits. It should however be pointed out that it is our opinion that all hotels over 100 rooms in Scenario 4 are unlikely to find the implementation of casinos financially viable based upon the costs to develop and operate casinos at

<sup>126</sup> The June 2008 edition of The Bermuda Job Market: Employment Briefs. Dept of Statistics

each facility. Hence, the benefits from this scenario will therefore in all likelihood not be fully realized. We do however believe that the full development of scenarios 1 and 2 are financially feasible and the full range of economic impacts from these would be realized. In addition, hybrids of these scenarios (i.e. Scenario 6) where there is one large stand-alone development in Hamilton combined with casinos at larger hotels, also is a viable alternative. It would however be our expectation, based on the market size and the economics of casino construction, and the requirements of financing and operational costs, that the development of casinos at major hotels and indeed smaller hotels (Scenarios 3, 4, 5, and 6) would in the end result in many of the properties choosing not to go forward with casino development with the result that they not exceed by much, if at all, the economic benefits produced under Scenario 2.

## Operating Expense Assumptions

The above spending impacts addressed the spending of induced tourists to the island outside the casino. In addition to spending on the various categories outlined above, there is also spending associated with casino gaming not only by induced tourists but by existing tourists and island residents. In order to calculate the economic impact of casino spending, The Innovation Group needed to estimate various operating expenses for casino operations. Consequently, The Innovation Group developed pro forma operating data including gaming revenues and anticipated operating expenses for certain of the potential casino development scenarios. This provided the necessary economic inputs to allow for an estimation of economic impacts deriving from the introduction of gaming.

We selected three different scenarios for further analysis. The selection of these particular scenarios was done in order to provide a representative sample of the three basic concepts for casino development. The first concept is one of a centrally located casino in Hamilton (as in Scenario #1), the second concept analyzes three casinos serving the central, eastern and western portion of the island thereby serving visitor and local populations in these areas (as in Scenario #2), and finally a concept which allows the development of casinos at major hotels throughout the island, (Scenario #4). The remaining scenarios in the casino revenue analysis aspect of our work are basically combinations or hybrids of the above three concepts.

The Innovation Group has worked with over 150 gaming facilities worldwide and we have developed staffing, marketing, and operational expense guidelines by studying this data and gaining an understanding of the nuances of these operations. In addition, several members of our firm have extensive hands on operating experience with resorts and resort casinos worldwide. Hence, we were able to utilize these valuable benchmarks in developing expenses information for use in the Economic Impact Analysis. The specific approach we utilized included identifying operating characteristics that would be expected under each of the competitive scenarios. For example, proposed casinos to be built within existing hotels would benefit from operating efficiencies by utilizing, and in some cases supplementing, administrative and support functions already established whereas stand alone facilities would need to incur 100% of these expenses in order to support the casino operation. Other indicators that were factored into the modeling

process include the competitive scenarios and the anticipated amenity mix which would affect how each property is to be marketed and thereby impact expenses.

The following is a list of major assumptions that were applied in the development of the expenses data:

- Gaming Tax or Regulatory Fees were NOT factored in to the analysis;
- There will be no limitations in terms of gaming product (including slot machines or table game type), number of gaming positions, hours of operation, gaming limits, credit issuance, or promotional or marketing opportunities;
- While staffing levels for each property were formulated using standards of appropriately sized facilities, employee compensation in terms of salaries and wages reflects Bermuda standards;
- The labor burden or the properties share of employee benefits, insurances and taxes is estimated at 35%;
- It is expected that the Bermuda Department of Tourism would continue to aggressively market the country as a destination. Hence, marketing costs for the casino operations reflect what is anticipated to be spent by the specific properties only; and
- The casinos will collectively share in the costs of additional police servicing that Bermuda will incur.

Pro Forma Operating Statements were developed down to the Earnings before Interest, Taxes and Depreciation and Amortization ("EBITDA") line item. EBITDA is a common metric utilized in the gaming and resort industries for evaluating the potential viability of a project and the amount of leverage that can be applied to a project. The following is a summary of Operating Profit (pre-Gaming Tax) based on a range of revenues that would be generated by casino hotels in the market. It should be noted that this is **before** gaming taxes which are taken off of the top line gaming revenues.

**Resort Operational Comparisons** 

Gaming Revenue Expectations	\$45 million +	\$25 million +	\$10 million +	> \$10 million
Operating Profit - Pre Gaming Tax	\$22,500,000	\$10,000,000	\$3,500,000	\$2,000,000
Margin	50.0%	40.0%	35.0%	20.0%

The results of this modeling effort are seen in the following section.

## Economic Impact From Casino Spending

Economic multipliers by industry sector have not been developed by the Government of Bermuda. To develop these multipliers is a major effort in and of itself, which is beyond the scope of this analysis. However, we did determine that the internal multipliers contained within the Bermuda Tourism Economic Impact Model for the "Other Recreation and Leisure" sector could be appropriately used for casino gaming which would clearly fall into this category. In this case we utilized the internal multipliers to develop the economic impacts from spending by the casinos on goods and services and

salaries. A recap of the casino revenues, employment, salaries and spending on goods and services is provided in the table below.

Casino Spending by Scenario

	Scenario 1	Scenario 2	Scenario 4
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
Slots	700	1,000	1,070
Tables	30	57	82
Positions	880	1342	1561.7
Win Per Position	\$264.56	\$234.40	\$214.48
Gross Gaming Revenues	\$84,976,565	\$114,815,981	\$122,257,869
FTE's	352	582	660
Salaries	\$22,888,375	\$38,438,408	\$41,216,658
Salaries as a % of Gross Gaming Revenue	26.9%	33.5%	33.7%
Casino Spending-Goods and Services	\$17,373,689	\$26,894,961	\$30,826,684
Promotional Allowance	\$3,399,063	\$5,247,139	\$5,576,186
Total Casino Spending	\$43,661,127	\$70,580,508	\$77,619,528

The operative input for the model is the sum of salaries, casinos spending on goods and services and promotional allowances which in the table above are presented in the Total Casino Spending line. Promotional allowance is a typical casino accounting term used to designate in-house goods and services that are given to customers as complimentary items. These items are typically not shown as an expense item but as a deduction to revenues, in reality though they are expenses to the casino and must be accounted for in an economic impact analysis.

The following table presents the results of the economic impact modeling.

# Economic Impact as a result of Spending by Casinos (in 000 000's of \$)

(In 000 000's of \$)				
	Scenario 1	Scenario 2	Scenario 4	
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels	
Income	3.5			
Direct	\$23	\$38	\$41	
Indirect	\$6	\$10	\$11	
Induced	\$10	\$16	\$18	
Total	\$39	\$65	\$70	
Public Sector Revenue		1		
Direct	\$4	\$6	\$6	
Indirect	\$1	\$1	\$2	
Induced	\$3	\$5	\$6	
Total	\$8	\$13	\$14	
Balance of Payments				
Exports - Total	\$44	\$71	\$78	
Imports - Direct & Indirect	\$4	\$6	\$7	
Imports - Induced	\$8	\$14	\$15	
Net Impact	\$32	\$51	\$56	

Again as would be expected Scenario 4 has the greatest economic impact but the case of casino spending the difference between scenarios 2 and 4 is much less than was the case in regard to spending by induced visitors to Bermuda. Again it would be expected that some of the hotels included in Scenario 4 as developing casinos would in fact not do so as some would find that they would not be financially viable. This same condition would also apply to scenario's 3, 5, and 6.

The following table presents our analysis of direct employment at the casinos developed in our analysis of operating pro formas for each potential properly under each scenario. Indirect and induced employment is developed on the same basis as for induced tourism employment impacts and is shown in the table below.

**Employment Impacts as a Result of Casino Spending** 

	Scenario 1	Scenario 2	Scenario 4
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
Direct	352	582	660
Indirect	106	172	189
Induced	170	284	306
Total	629	1,038	1,155

## Total Economic Impact From Operations

Combining the effects of spending by induced visitors and spending by the casino the following two tables represent the positive overall economic impacts from casino development.

Total Economic Impact as a

Result of Spending by Casinos and Induced Tourists

(in 000 000's of \$)

(11 000 000 \$ 01 \$)				
	Scenario 1	Scenario 2	Scenario 4	
	1 casino downtown Hamilton	3 casinos- Hamilton, Dockyard, St. Georges	casinos only a major hotels	
Income	1			
Direct	\$52	\$73	\$89	
Indirect	\$25	\$32	\$41	
Induced	\$26	\$36	\$44	
Total	\$103	\$140	\$175	
Public Sector Revenue				
Direct	\$13	\$18	\$23	
Indirect	\$4	\$5	\$6	
Induced	\$9	\$12	\$15	
Total	\$25	\$34	\$43	
Balance of Payments				
Exports - Total	\$107	\$145	\$182	
Imports - Direct & Indirect	\$16	\$21	\$28	
Imports - Induced	\$22	\$30	\$37	
Net Impact	\$69	\$94	\$117	

The following table presents the total employment generated by the spending of induced tourists and by the casinos within the Bermudian economy.

Total Employment Impacts as a Result of Casino Spending and Spending by Induced Tourists

	Scenario 1	Scenario 2	Scenario 4
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
Direct	855	1,177	1,493
Indirect	423	548	714
Induced	449	614	768
Total	1,727	2,339	2,975

## Economic Impact From Construction

This section presents estimates of the economic impact from construction of casinos associated with each of the selected scenarios. To estimate these impacts it was first necessary to develop assumptions with regard to the building programs. It should be pointed out that The Innovation Group is not an architectural or engineering firm. Our estimates were developed utilizing a variety of sources and were developed for purposes of attempting to estimate the economic impacts of any proposed casino developments. A significant number of variables would likely ultimately effect the development and construction costs estimates. Hence, these estimates should not be utilized or relied upon but are presented purely to form a basis for estimating the economic impacts.

## **Building Program Assumptions**

The following presents assumptions on the number of gaming positions by scenario.

**Scenario 1 Gaming Positions** 

A A	Downtown Hamilton
Slots	700
Tables	30
Positions	880

**Scenario 2 Gaming Positions** 

	Downtown Hamilton	St. George's	Old Naval Dockyard	Total
Slots	500	200	300	1000
Tables	25	12	20	57
Positions	650	272	420	1342

**Scenario 4 Gaming Positions** 

	Fairmont Southampton	Fairmont Hamilton	Hyatt St. George	Elbow Beach	Grotto Bay	Newstead	Tuckers Point	Total
Slots	300	200	200	120	100	70	80	1,070
Tables	20	12	12	12	10	8	8	82
Positions	420	272	272	192	160	118	127	1,562

In addition to the above it is assumed that the casino will have the following:

#### Scenario 1

- Two restaurants, one high-end and one mid level restaurant, totaling 200 seats
- · A bar and small nightclub
- Kitchens
- · Relatively high end finish

#### Scenario 2

- We have assumed for the purposes of this analysis that these casinos are all new stand along facilities built from the ground up.
- The level of finish at the Dockyards and St Georges is assumed to be in the average range compared to the Hamilton facility which is assumed to have a higher level of finish.
- The Hamilton casino would have two restaurants, one high-end and one mid level restaurant, totaling 180 seats and would also include a bar and small nightclub although slightly smaller than in Scenario 1.
- St Georges would have a small restaurant of 60 seats and a bar/nightclub about half the size of that in the Hamilton casino.
- At the Naval Dockyards There would be one restaurant with 100 seats and a bar/nightclub about half the size of that in the Hamilton casino.

#### Scenario 4

In Scenario 4 all casinos are assumed to be located in existing hotels. We have assumed that each of the facilities would utilize existing buildings within their complex in which to house the casinos. Development and construction costs are therefore calculated on the basis of renovating and outfitting existing space with the appropriate FF&E added. No other amenities such as restaurants and bars are included as these are assumed to already be present within the hotel or nearby.

#### **Estimated Construction Costs**

The following table's present the estimated total construction costs inclusive of FF&E but excluding gaming equipment for each scenario.

**Total Construction Costs by Scenario** 

	Scenario 1	Scenario 2	Scenario 4
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
Construction Cost	\$53,500,000	\$76,206,860	\$37,824,374

### Breakdown of Construction Costs and Employment

The following table breaks the construction costs down into its constituent components. Tariffs are estimated at 32% of material costs all of which are assumed to be imported. Total labor costs are estimated at 49.6% of total construction costs and include a 40% employment tax. Tariffs and employment tax are broken out in the table below.

Breakdown of Construction Costs by Scenario

	Materials	Tariffs	Labor Income	<b>Employment Tax</b>
Scenario 1-Hamilton Casino	\$20,583,206	\$6,380,794	\$15,921,600	\$10,614,400
Scenario 2-Three Casino Scenario	\$29,319,280	\$9,088,977	\$22,679,162	\$15,119,441
Scenario 4 Large Hotels	\$14,552,278	\$4,511,206	\$11,256,534	\$7,504,356

#### Direct Government Revenue from Construction

Derived from the above table the following presents the direct government revenue from construction activity related to casino construction under each of the scenarios.

**Direct Government Revenue from Construction** 

Direct Government Revenue	Tariffs	Employment Tax	Total
Scenario 1-Hamilton Casino	\$6,380,794	\$10,614,400	\$16,995,194
Scenario 2-Three Casino Scenario	\$9,088,977	\$15,119,441	\$24,208,418
Scenario 4 Large Hotels	\$4,511,206	\$7,504,356	\$12,015,562

## Construction Related Direct Employment

We have assumed an annual construction salary of not less than \$69,222 annually from which we have estimate FTE's, or fulltime equivalents (equal to one man employed for one year) for each scenario as shown in the table below.

**Construction Related Employment** 

	FTE's
Scenario 1-Hamilton Casino	230
Scenario 2-Three Casino Scenario	328
Scenario 4 Large Hotels	163

### Total Construction Impact on Income and Employment

The following presents the total economic impact of construction of the casinos under each scenario and includes via the multiplier effect both the indirect and induced impact on income and employment. We have not included any indirect or induced impacts on government revenues or balance of payments as the appropriate multipliers are unavailable.

	Scenario 1	Scenario 2	Scenario 4
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
Income			- 10
Direct	\$15,921,600	\$22,679,162	\$11,256,534
Indirect	\$4,153,461	\$5,968,200	\$3,020,046
Induced	\$6,922,435	\$9,549,121	\$4,941,893
Total	\$26,997,496	\$38,196,483	\$19,218,472
Employment		1	7
Direct	230	328	163
Indirect	60	86	44
Induced	100	138	71
Total	390	552	278

## Likely Range of Capital Investment

In order to provide a reasonable range of the likely level of capital developers would be willing to invest in the Bermuda gaming market we have provided the following range of estimates. These are based on the EBITDA margins as projected in this analysis and assume an 18% gaming tax. The following provides a rough range for the likely level of capital investment under each scenario. This is based on our experience of the type of return investors would be seeking in this sector.

Range of Likely Capital Investment

	Scenario 1	Scenario 2	Scenario 4
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
Low	\$105	\$100	\$95
High	\$160	\$150	\$140

## Direct Impact on the Hotel Industry

One of the primary goals of the introduction of gaming to Bermuda is to induce greater visitation to the island and consequently, by implication, to improve the economic conditions of the existing lodging industry which has been hit by falling occupancy rates and revenues. The amount of money spent by induced visitors on accommodations was

estimated previously for the purposes of the economic impact on the country's economy. However, that analysis utilized air arrival survey data, with its inherent inaccuracies, which broke down expenditures by type (i.e. accommodations, transport etc), as required for the economic impact analysis. In this section we have attempted to give a more accurate picture of the impacts on the hotels in terms of impact on occupancy rates and revenues.

In the table below we have calculated, by scenario, the increase in room demand and the resultant effect on occupancy. In addition we have calculated the impact on occupancy with the addition of the proposed Park Hyatt and the new Tuckers Point facility assuming that they bring no additional demand to the island in and of themselves. First it was necessary to estimate 2008 demand and occupancy rates which are presented below.

Estimated 2008 RND and Occupancy Rates

	Room Count	RND	Available Room Nights	Occupancy	Decline in RND 2007-2008
2008 EST*	2,736	597,531	998,488	59.84%	11.53%

\*Based on YTD Thru Sept 2008

We then added the increment of RND from the Gaming Market analysis and recalculated occupancy rates both with and without the Hyatt Park Place and Tuckers Point additions. Form this calculation it can be seen that there are significant increases in occupancy an substantial increases in hotel revenues with Scenarios 3 and 6 offering the greatest increases with Scenarios 4 and 5 not far behind. It should be noted that these increases in revenues are already captured within the economic impact model and are not additive; this section merely provides a more lucid picture of the impact on the local lodging industry.

Impact of Gaming on Hotel Occupancy and Revenues

	Existing Demand	New Demand as a Result of Gaming	% increase in Room Demand	Current Occupancy Rate	New Occupancy Without Additions to Supply	Occupancy Rate Assuming Tuckers Point and Hyatt Developments	Increase in Room Revenue as a Result of Gaming
Scenario 1	597,531	96,794	16.2%	59.84%	69.5%	64.2%	\$31,108,479
Scenario 2	597,531	114,713	19.2%	59.84%	71.3%	65.8%	\$36,867,333
Scenario 3	597,531	177,087	29.6%	59.84%	77.6%	71.6%	\$56,913,710
Scenario 4	597,531	160,422	26.8%	59.84%	75.9%	70.1%	\$51,557,549
Scenario 5	597,531	160,422	26.8%	59.84%	75.9%	70.1%	\$51,557,549
Scenario 6	597,531	174,437	29.2%	59.84%	77.3%	71.4%	\$56,061,76

While we have not developed full economic impacts for scenarios 3, 5, and 6 the above information provides a good surrogate for economic impact estimation for these scenarios. It should be noted that both scenarios 3 and 6 provide greater impact on hotel revenues and thus would be expected to have a greater economic impact than scenarios 1, 2 and 4. It would however be our expectation, based on the market size and the economics of casino construction, and the requirements of financing and operational

costs, that the development of casinos at major hotels and indeed smaller hotels (Scenarios 3, 4, 5, and 6) would in the end result in many of the properties choosing not to go forward with casino development with the result that the economic impacts would be reduced. It is our belief that Scenario 6 offers an attractive option in that Bermuda would be guaranteed a major casino in Hamilton and would at the same time also benefit from at least some of the major hotels in this scenario moving forward with casino development. This would result in significantly greater economic impacts than under scenarios 1 or 2 but somewhat less than that shown here for Scenario 4(assuming all major hotels would develop a casino in that scenario).

In addition to the impact on existing properties, the advent of gaming and the added attractiveness it brings to hotel developers considering developing property on the island cannot be ignored. As has occurred in other jurisdictions, it is likely that several of the planned hotel projects currently in hiatus would move forward as a direct consequence of the advent of gaming in Bermuda The presence of gaming offers the prospect of an additional profit center that developers can utilize in raising financing and providing adequate returns to equity holders; hence gaming has been instrumental in other jurisdictions in helping to jumpstart new projects. However, it is very difficult to quantify the economic impacts of these proposed projects in Bermuda without knowledge of the specific economics of each project.

## Summary of Economic Impacts

The following table provides a complete summary of the economic impacts of the three scenarios analyzed.

**Summary of Economic Impacts** 

	Summary of Economic Imp	pacts	
	Scenario 1	Scenario 2	Scenario 4
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
	From Operations and Induced To (Annually recurring impacts)		
Income	(Annually recurring impacts		
Direct	\$52	\$73	\$89
Indirect and Induced	\$51	\$68	\$85
Total	\$103	\$140	\$175
Public Sector Revenue			
Direct	\$13	\$18	\$23
Indirect and Induced	\$13	\$17	\$2
Total	\$25	\$34	\$4:
Balance of Payments			
Exports	\$107	\$145	\$182
Imports	\$38	\$51	\$65
Net Impact	\$69	\$94	\$117
	The same of		
<u>Employment</u>	1	7	
Direct	855	1177	1493
Indirect and Induced	872	1162	1482
Total	1,727	2,339	2,975
	From Construction (one year imp	pacts)	
Income			
Direct	\$16	\$23	\$1
Indirect and Induced	\$11	\$16	\$6
Total	\$27	\$38	\$19
Employment(			
Direct	230	328	163
Indirect and Induced	160	224	11:
Total	390	552	27

# OTHER COSTS ASSOCIATED WITH CASINO DEVELOPMENT

In other sections of this report we have identified various costs associated with the implementation of gaming in Bermuda. These costs relate to a variety of infrastructure and social related costs and are presented in summary form in the table below.

Sum of Other Costs Associated with Gaming

	Employment	Expenses	Total Salaries and Benefits	Total
Regulatory	23	\$466,050	\$1,702,400	\$2,168,450
Policing Costs		\$54,000 for Squad car every three years	\$1,000,000	\$1,020,000
Mitigation Programs	2	\$360,000	\$140,000	\$500,000
Problem Gambling Treatment Costs	7	\$200,000-\$400,000-Additional office space	\$565,000	\$865,000
Problem Gambling Hotline		\$50,000 annually	/	\$50,000
Total	32	\$1,196,050	\$3,407,400	\$4,603,450

These cost are typically offset by a licensing fees, gaming taxes and a special levy for problem gambling issues, all paid by the casino operators.

## IMPACT ON LOCAL BUSINESSES

#### Introduction

Local businesses can also benefit from the development of casinos in a jurisdiction. These benefits occur from:

- Casino visitors stopping at local retail outlets (i.e. gas stations) for goods and to a
  much lesser extent restaurants. The impact of long-distant patrons staying at area
  hotels is also well established; even in markets with casino hotels, non-casino hotels
  enjoy boosts in occupancy.
- The development of casinos in Bermuda would also likely generate substantial
  employment as noted above. This influx of employees into the areas will in turn
  generate demand to local F&B and retail establishments. This effect can be enhanced
  when casinos implement bonus or discount programs with their employees to
  encourage use of local businesses.

## Impact of Casinos on Local Businesses

There has been much contradictory research on the issue of how the introduction of casinos impact local businesses.. For example gaming opponent Earl Grinols in "Gambling in America" (2004), suggests that there were \$170 in gains per \$1000 increase in casino revenue for businesses within 0-5 miles of a casino, and that two thirds of these were gas station increases. However, due to the "cannibalization" or "substitution effect" retailers at greater distances would lose revenue. This argument of a decline is intimately associated with the "cannibalization" effect. However in the case of Bermuda approximately 78% of estimated gaming revenues are being generated from the tourism segment who are traveling to Bermuda to explore and visit the island and their local fare. This situation is likely to largely negate the substitution effect, and therefore the potential negative effects Grinols cites in the wider area beyond five miles from the casino would be largely mitigated.

We can look to some qualitative evidence to support the likely local impact on businesses.

To briefly illustrate contrasting experiences, in the small city of Joliet, Illinois, outside of Chicago, gamers for the most part visit the Harrah's casino near downtown and leave straight away. Local businesses complain that the promised spin-off spending has failed to materialize, and re-development around the casino complex has been lacking. This could be a result of the lack of offerings and planning in the surrounding area. By contrast, the casinos in downtown Shreveport, Louisiana were developed as part of master planned downtown regeneration. The \$410 million capital investment by casinos is credited by local officials as the catalyst for construction of a 350,000 sq. ft. convention center, and a 120,000 sq. ft. Red River District urban entertainment

development, with restaurants new sidewalks, landscaping, art islands and residential conversion projects.

One form of business does typically benefit from casino development, regardless of location. Existing hotels usually experience an increase in occupancy rates, even when the casino opens its own hotel. In the Mississippi Gulf Coast, for example, hotel occupancy increased after casino development despite the fact that casinos were required to open their own hotels and despite an increase in the supply of non-casino hotels. In Shreveport, hotel occupancy rates averaged about 60 percent prior to casino gaming compared to 85 to 90 percent today.

## The Alleged Substitution Effect

The alleged "substitution effect" of casino spending is often cited as the basis for claims that casinos will devastate, through cannibalization, local businesses, especially smaller "mom and pop" retail, restaurant and entertainment businesses.

In Massachusetts this argument has been especially prominent and it is worth here to follow the argument and counterargument as this topic is likely to be raised in Bermuda. In a commentary entitled "Why I have opposed casinos in the Commonwealth" in 2007 on Bluemass.com Representative Dan Bosley states:

Fourth, we know that most of the customers for a casino come from a 50-mile radius. They are spending money that they are already spending on other goods and services. This impacts our tourism industry, our food and beverage industries and our entertainment industries at a minimum. This is not new money but money already spent in a much more diverse way in our economy. In 1977 there were over 225 bar, restaurants, and taverns in Atlantic City. Today there are less than 50 as the casinos have engulfed them. That happens everywhere. I would like to give you the statistics for Ledyard Connecticut, but for all intents and purposes, there is no longer a Ledyard.

This argument was directly addressed by Clyde Barrow Director for the Center of Policy Analysis at the University of Massachusetts Dartmouth. In an article for the Gaming Law Review and Economics Volume 12, Number 4, 2008 coauthored with Mathew Hirshy entitled "The Persistence of Pseudo-Facts in the U.S. Casino Debate: The Case of Massachusetts" they trace the origin of the Atlantic City "myth" referenced in Representative Bosley's commentary above:

The Atlantic City myth has had a long shelf life and it resurfaced in the Massachusetts casino debate despite recent studies that should have sounded the death knell for this pseudo-fact. The Atlantic City myth seems to originate in a series of stories in the *New York Times*, although it appears that the misinformation printed in the *Times* was given to reporters by the Atlantic City Restaurant and Tavern Association as part of a public relations campaign to win more concessions for its members from the city's casino hotels.

This is the origin of the "myth" but what about the veracity? In the same article Barrow cites work by Kathryn Hashimoto and George Fenich which largely debunks the Atlantic City myth:

.... by examining data in the U.S. Census Bureau's County Business Patterns. Hashimoto and Fenich found that the number of eating and drinking establishments in Atlantic County was actually declining in the years prior to the opening of the first casinos. However, this decline was actually reversed after the first casinos opened, when the number of non-casino eating and drinking places increased from 415 in 1978 to 569 in 1994 (37%) (the year the New York Times first reported the Atlantic City pseudo-fact). Similarly, the number of employees in this sector increased from 4,439 in 1978 to 6,624 in 1994 (50%). Payroll rose by two and one-half times the rate of employment, which indicates that wages improved in this sector due to competition from the casinos; a fact that explains why state restaurant associations routinely oppose casino legislation. It is not because they will go out of business, but because they will have to offer their employees better wages and benefits. Moreover, in the 11 years since the Hashimoto and Fenich study, the number of non-casino eating and drinking places in Atlantic County has continued to increase to 625 (9.8%) in 2004 with 9,020 employees (36%).

Some might argue that an analysis focused entirely on Atlantic City is flawed. However, Barrow in his argument further cites work by Fenich and Hashimoto of a more extensive geographical nature and which is as convincing as their analysis of Atlantic City:

Fenich and Hashimoto have analyzed the local and regional impact of land-based, floating riverboat, and dockside casinos (both commercial and Indian) on local food and beverage and retail establishments in 20 jurisdictions, including Colorado, Connecticut, Illinois, Indiana, Iowa, Louisiana, Mississippi, Missouri, New Jersey, and South Dakota. Their overall findings are unequivocal about the fact that: [A]cross the U.S., from mountains to beachfront to the industrial northeast, from small rural towns to large urban areas, the legalization and subsequent development of casino gaming did not drive all the restaurateurs out of business. Casinos did not cause the predicted drop in the number of businesses, nor the drop in people employed, nor the drop in payroll. In fact, they have just the opposite effect. When casinos are developed, all aspects of local food and beverage business increase: the number of establishments' increases, the number of people employed increases, and payroll increases at a greater rate than the first two.

Again in a study entitled "Economic and Fiscal Analysis for a West Warwick Resort Casino" prepared for the State Senate of Rhode Island by the same Center for Policy Analysis as referenced above, further evidence is offered to refute the claim that local businesses will be impacted. The authors' state:

For example, there was a net increase of eight restaurants in Bossier City, Louisiana following the introduction of riverboat casinos. The city's taxable restaurant sales, excluding restaurants in the hotels and casinos, increased by 5% in 1994 and by 7% in 1995 *after* the introduction of riverboat casinos. In Biloxi/Gulfport, Mississippi, the rate of non-casino retail sales growth increased from an average of 3% annually (1990-1992) in the years prior to riverboat gambling to 12% annually in the years after riverboat gaming began in the locality. Restaurant sales in Biloxi/Gulfport have increased overall, although increased competition from national chains and a migration of clients toward higher quality has forced some local restaurants to close. Nevertheless, the net economic welfare benefit is better quality, wider selection, increased overall sales and employment in eating and drinking establishments. Finally, along the Mississippi Gulf Coast overall hotel occupancy has increased from 55% in 1992 to 70% following the introduction of riverboat gaming.

#### Furthermore the authors point out that:

... the number of restaurants in the area surrounding Foxwoods and Mohegan Sun increased from 472 to 506 following the casino's opening, while restaurant employment increased from 5,911 to 6,628 during the same period. .................................. In Gilpin County Colorado, the number of restaurants increased from 31 to 40 after the introduction of casino gaming. In Tunica County, Mississippi,

the number of restaurants increased by 13% and restaurant employment grew by 9% after the introduction of casino gaming in the county

Also Hoenack, Stephen A. and Gary Renz. 1995. Effects of the Indian-Owned Casinos on Self-Generating Economic Development in Non-Urban Areas of Minnesota. Plymouth, Minnesota: Stephen A. Hoenack and Associates found that with the introduction of casino gaming in Minnesota towns within a 30-mile radius of a non-urban casinos resulted in significant growth in consumer and service businesses that could be attributed to the advent of casino gaming in the area, and that the closer the area was to the casino the greater the positive effect.

In addressing the issue of cannibalization of local businesses the American Gaming Association (AGA) offers the following evidence:

An economic analysis prepared for the National Gambling Impact Study Commission (NGISC) by Penn State University economist Adam Rose found little evidence of economic substitution after the introduction of new casinos. As his meta-analysis reveals: "The preponderance of empirical studies indicate claims of the complete 'cannibalization' of pre-existing local restaurants and entertainment facilities by a mere shift in resident spending is grossly exaggerated." <sup>127</sup>

Additional research shows casinos actually stimulate local economies, resulting in communitywide growth in population, jobs, incomes and industry. After studying numerous U.S. casino jurisdictions, researchers at the University of New Orleans concluded the following in their 1997 report, *The Effects of Casinos on Local Restaurant Businesses*: "When casinos are developed, all aspects of the local food and beverage business increase: the number of establishments increases, the number of people employed increases and payroll increases at an even greater rate than the first two."128

#### Similar conclusions were reached in other studies:

 Even after accounting for the so-called "substitution effect," economists at the University of Missouri and Washington University concluded that casino gambling in Missouri had a net positive annual impact on Missouri output of \$759

<sup>128</sup> George Fenich and Kathryn Hashimoto, "The Effects of Casinos on Local Restaurant Business," paper presented at the International Conference on Gambling and Risk-Taking, Montreal, 1997.

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<sup>&</sup>lt;sup>127</sup> Adam Rose and Associates, The Regional Economic Impacts of Casino Gambling: Assessment of the Literature and Establishment of a Research Agenda, report prepared for the National Gambling Impact Study Commission (State College, Pa.: Adam Rose and Associates, Nov. 5, 1998),

- million, corresponding to a continuing higher level of employment of 17,932 jobs generating \$508 million more in personal income. 129
- A multijurisdictional analysis of retail spending found that in Biloxi/Gulfport, Miss., annual retail sales growth rates increased an average of 3 percent per year from 1990 to 1992, the year when casinos were introduced. Between 1993 and 1995, retail sales jumped 13 percent. In Will County, Ill., retail sales growth trailed statewide trends until 1992, when riverboat casinos were introduced in the local economy. But each year between 1992 and 1995, retail sales growth in Will County exceeded the state rate. In Shreveport/Bossier City, La., retail sales increased by more than 10 percent during 1994, the year that riverboat casinos opened, as the region enjoyed the highest retail sales increase in more than a decade. 130
- Representatives of the food industry on Mississippi's Gulf Coast indicate that casinos have brought in more business. With increased tourism numbers and growth in residents, new franchise restaurants have been opening and local favorites are still bustling. According to Bob Taylor, president of the Coast Chapter of the Mississippi Restaurant Association, "I think the chain restaurant industry on the Coast is going to continue to expand. Whether we have more casinos or not, we're going to continue to have growth" in non-casino restaurants. 131

The view that gaming permanently substitutes for other expenditures distorts historical experience. In free market economies, providing new outlets for consumer spending brings in new income. It doesn't make any difference what the "product" is or whether there's even a tangible "product" at all. Satisfying consumer demand generates new spending, creates new jobs and increases overall incomes.

Further evidence is presented in a research conducted in 1996 by Nancy Reeves and Associates for the Mille Lacs Band of Ojibwe, entitled "The Economic Impact of Grand Casino Mille Lacs and Grand Casino Hinckley on Their Surrounding Areas", on this analysis they found:

At least 15 businesses have either opened, expanded, or re-opened since the opening of Grand Casino Mille Lacs. Included are 4 hotels/motels and resorts, 8 restaurants and fast food establishments, 2 gas stations and a go-kart track. Together, these businesses have added an estimated 142 jobs in the area.

<sup>129</sup> Charles Leven et al., "Casino Gambling and State Economic Development," paper presented at the Regional Science Association, 37th European Congress, Rome, Aug. 26-29, 1997.

Arthur Andersen, Economic Impacts of Casino Gaming in the United States, Volume 2: Micro Study (Washington, D.C.: American Gaming Association, May 1997).

Joey Bunch, "Eateries doing well with help of casinos," The Biloxi (Miss.) Sun Herald, May 25, 2001.

With the opening of Grand Casino Hinckley in 1992, the hospitality business in Hinckley was transformed from a rest stop for travelers to a tourist destination. In addition to the casino complex, with its 1,275 jobs, Hinckley has added 11 new businesses and expanded 4 more since 1992, adding 87 new jobs. As is the case in the Mille Lacs area, Hinckley is now a year round destination because of the casino. Also similar to the Mille Lacs situation, the main street businesses in Hinckley have seen increases in customer spending attributed primarily to casino employees living in the area.

As a final summary of his findings Dr. Fenich reports that "one finding was surprisingly consistent: in jurisdictions from the seashore to the riverfront to rural areas, north and south, east and west, local restaurants tended to thrive after a casino opened nearby...More restaurants opened; more employees were hired; and restaurant payrolls increased after a casino opened in the region" 132

In summary, there is a wealth of evidence contradicting the proposition that gaming permanently substitutes for other expenditures in local economies. As concluded by Penn State University economist Adam Rose in a study for the National Gambling Impact Study Commission (NGISC), "The preponderance of empirical studies indicate claims of the complete 'cannibalization' of pre-existing local restaurants and entertainment facilities by a mere shift in resident spending is grossly exaggerated." <sup>133</sup>

## Further Examples of Benefit to Local Businesses

To support the hypothesis that casino gaming engenders new businesses rather than hurting existing businesses we looked at the number of business in selected gaming markets both prior to and after the introduction of casinos.

## Shreveport/Bossier

The Shreveport Bossier market was referenced previously in this report. Gaming began in Shreveport/Bossier in 1993 and by 1997 the market was generating over half a billion dollars a year from over 11.6 million visits with over 5,100 gaming positions.

#### Percent change in Number of Eating and Drinking Places in Shreveport/Bossier

Parish	1993-1997
Bossier Parish, LA	13.8%
Caddo Parish, LA	14.6%

Source: US Census County Business Patterns

Despite the advent and growth of gaming between 1993 and 1997 the number of eating and drinking establishments in both Bossier and Caddo (Shreveport) parishes increased during this period by a significant increment as seen in the table above. This is contrary

<sup>132 &</sup>quot;Economic and Fiscal Analysis for a West Warwick Resort Casino" prepared for the State Senate of Rhode Island Center of Policy

Analysis at the University of Massachusetts Dartmouth. 2004

133 Adam Rose and Associates, *The Regional Economic Impacts of Casino Gambling: Assessment of the Literature and Establishment of a Research Agenda*, report prepared for the National Gambling Impact Study Commission (State College, Pa.: Adam Rose and Associates, Nov. 5, 1998).

to the contention of casino opponents that casino development will result in a decline in the number of eating and drinking establishments.

### The Mississippi Gulf Coast

Gaming started in the Gulf Coast in 1993. Today there are 11 casinos generating over \$1.2 billion in gaming revenues. If any market could have expected a decline in eating and drinking establishments as a result of casino development it would have been on the Gulf Coast. However, as the following table shows between 1991 and 1997 the number of eating and drinking establishments actually increased in Hancock County, home to 2 of the 11 casinos. The increases were an astounding 77% for drinking and dining establishments while retail establishments in both counties also increased over this period. The Gulf Coast shows no evidence of any significant negative impact on retail or eating and drinking establishments. To the contrary it shows an increase.

#### Percent Change in Retail and Eating and Drinking Establishments 1991-1997 in the Mississippi Gulf Coast

County	Retail (1991-1997)	Eating and drinking places (1991-1997)		
Harrison County, MS	14.7%	4.2%		
Hancock County, MS	6.6%	77.1%		

Source: US Census County Business Patterns

#### St. Louis

Gaming began in the St. Louis area in 1994. St. Louis now has six casinos generating approximately \$950 million in gaming revenues. The casinos are spread over the metro area and two are located on the Illinois side of the border. Of the counties in which they are located, only St. Louis City (independent of St. Louis County) showed declines in the number of eating and drinking establishments from 1993 to 1997. Only two of the six casinos are located in this area. The numbers of eating and drinking establishments in areas in which the four other casinos are operating have increased during this time period.

#### Percent Change in Eating and Drinking Establishments 1993-1997 in the St Louis Market

County	1993-1997
St. Louis County, MO	8.0%
St. Louis City, MO	-2.2%
Madison County, IL	5.9%
St. Clair County, IL	7.2%

Source: US Census County Business Patterns

## Kansas City

Kansas City's gaming market has grown since its inception in 1994 to more than 8,000 positions which generate in excess of \$700 million annually. Like the St. Louis market, the casinos are located in various parts of the metro area. The following table shows that the numbers of retail establishments have grown in Clay and Platte counties from 1993 to 1997 while the numbers of eating and drinking establishments have grown in Platte and Jackson counties.

Percent Change in Eating and Drinking Establishments 1993-1997 in the Kansas City Market

County	Retail (1993-1997)	Eating and drinking places (1993-1997)		
Clay County, MO	3.7%	-2.5%		
Platte County, MO	5.3%	28.2%		
Jackson County, MO	-2.1%	3.7%		

Source: US Census County Business Patterns

#### Des Moines

Prairie Meadows racetrack opened its casino operation in 1995. Today the facility generates more than \$175 million annually in gaming revenues. This market boasts another example of a casino's positive impact on local businesses. From 1993 to 1997, the number of eating and drinking places increased by 6.0% in Polk County, IA.

## Percent Change in Eating and Drinking Establishments 1993-1997 in the

Des	Moines Market
	Eating and drinking places (1993-1997)
Polk County, IA	6.0%

Source: US Census County Business Patterns

#### New Orleans

In New Orleans there is no reasonable way to address the issue statistically with this data set. During the period for which we have County Business Pattern data there is an unsettled picture for casino development. During this period Harrah's opened up a temporary facility in an unsafe neighborhood which ultimately went bankrupt only to reopen several years later. The only casinos in the metro area were two riverboats in the suburbs. Nevertheless the number of eating and drinking placers increased between 1993 and 1997 as shown in the table below.

### Percent Change in Eating and Drinking Establishments 1993-1997 in

No	New Orleans		
The state of	1993-1997		
% Change	1.3%		

Located in a major urban area, Harrah's casino in downtown New Orleans is the state's only commercial land-based casino. It has approximately 3,000 gaming positions and gaming revenues of more than \$300 million. State legislation, driven by opposition from local businesses, initially limited the casino to a cafeteria-style buffet of 250 seats and prohibited the casino from developing a hotel or using gambling revenue to subsidize menu prices.

However, after operating for several years, the fears of local businesses were allayed and Harrah's was allowed to develop a hotel and expand its F&B, including a high-end celebrity steak house. Despite its F&B expansion and hotel opening, Harrah's continues to send its guests to the partnered restaurants, often times on a comp basis paid for by Harrah's, and to buy large room blocks from several adjacent hotels.

Another major impact of Harrah's has been the activation of the lower end of Canal Street which has made the area safer and more amenable to pedestrian traffic, thus benefitting local businesses. In particular, Harrah's redeveloped an adjacent two-block

strip as a pedestrian retail and entertainment mall with a major restaurant anchor. Called the Fulton Street experience, the redevelopment has benefitted an existing bar and restaurant that anchors the far end of the strip.

## Implications for Bermuda

In relation to the introduction of casino gaming to Bermuda, we would expect that there would be a significant positive impact on local businesses. First there will be an influx of visitors not normally drawn to Bermuda engendered by the presence of casino gaming. These patrons will spend money in the local economy to the benefit of the local businesses. In addition local Bermudian's who currently travel abroad to enjoy gambling elsewhere will be encouraged by the presence of a casino to spend at least a portion of their annual gambling budget at Bermudian casinos. This represents a net game to the island's economy.

There are certain steps that a local community can take to ensure that the advent of a casino benefits local merchants and businesses. A casino and its environs should be carefully master planned to ensure that casino patrons have access to quality retail and F&B developments in the immediate area of the casino. Such a master plan should carefully look at access routes, merchant mix, visibility and the attractiveness of the area. By working closely with the casino developer local communities can not only extract the maximum benefit from casino visitation but can also enhance the success of the casinos. For example any alternative that considers a casino in downtown Hamilton has the ability to lend itself to inclusion in a master plan that would help ensure that surrounding business benefit by close integration with the casino complex and careful physical planning. In such a situation the casino could act in a fashion similar to a department store anchor in a shopping mall development.

# **CONCLUSIONS**

In terms of annual economic impact Scenario 4 provided the greatest impact on income, employment, public sector revenues and balance of payments as shown in the tables below.

#### Total Economic Impact as a Result of Spending by Casinos and Induced Tourists (in 000 000's of \$)

(111 000 000 5 01 5)						
	Scenario 1	Scenario 2	Scenario 4			
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels			
Income	7.0	1. 1				
Direct	\$52	\$73	\$89			
Indirect	\$25	\$32	\$41			
Induced	\$26	\$36	\$44			
Total	\$103	\$140	\$175			
Public Sector Revenue Direct Indirect Induced	\$13 <b>\$4</b> \$9 <b>\$25</b>	\$18 \$5 \$12 <b>\$34</b>	\$23 \$6 \$15 <b>\$4</b> 3			
Total  Balance of Payments	1					
Exports - Total	\$107	\$145	\$182			
Imports - Direct & Indirect	\$16	\$21	\$28			
Imports - Induced	\$22	\$30	\$3			
Net Impact	\$69	\$94	\$117			

Total Employment Impacts as a Result of Casino Spending and Spending by Induced Tourists

	Scenario 1	Scenario 2	Scenario 4
	1 Casino Downtown Hamilton	3 casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels
Direct	855	1,177	1,493
Indirect	423	548	714
Induced	449	614	768
Total	1,727	2,339	2,975

However in terms one time of construction impacts Scenario 2 provides the greatest impact in terms of employment, income and direct government revenue.

**Direct Government Revenue from Construction** 

Direct Government Revenue	Revenue Tariffs		Total	
Scenario 1-Hamilton Casino	\$6,380,794	\$10,614,400	\$16,995,194	
Scenario 2-Three Casino Scenario	\$9,088,977	\$15,119,441	\$24,208,418	
Scenario 4 Large Hotels	\$4,511,206	\$7,504,356	\$12,015,562	

Total Economic Impact on Income and Employment From Construction

	Scenario 1	Scenario 2	Scenario 4	
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels	
Income	1	120 E 1 E 10	1 4 10 11 11 11 11	
Direct	\$15,921,600	\$22,679,162	\$11,256,534	
Indirect	\$4,153,461	\$5,968,200	\$3,020,046	
Induced	\$6,922,435	\$9,549,121	\$4,941,893	
Total	\$26,997,496	\$38,196,483	\$19,218,472	
Employment				
Direct	230	328	163	
Indirect	60	86	44	
Induced	100	138	71	
Total	390	552	278	

One of the primary goals of the introduction of gaming to Bermuda is to induce greater visitation to the island and consequently, by implication, to improve the economic conditions of the existing lodging industry which has been hit by falling occupancy rates and revenues. The following table presents the direct impacts on the hotel industry in terms of impact on occupancy rates and revenues.

Impact of Gaming on Hotel Occupancy and Revenues

	Existing Demand	Existing Demand	Current Occupancy Rate	New Demand as a Result of Gaming	% increase in Room Demand	New Occupancy Without Additions to Supply	Occupancy Rate Assuming Tuckers Point and Hyatt Developments	Increase in Room Revenue as a Result of Gaming
Scenario 1	1 casino downtown Hamilton	597,531	59.84%	96,794	16.20%	69.50%	64.20%	\$31,108,479
Scenario 2	3 casinos- Hamilton, Dockyard, St. Georges	597,531	59.84%	114,713	19.20%	71.30%	65.80%	\$36,867,333
Scenario 3	3 casinos plus casinos at major hotels	597,531	59.84%	177,087	29.60%	77.60%	71.60%	\$56,913,710
Scenario 4	casinos only at major hotels	597,531	59.84%	160,422	26.80%	75.90%	70.10%	\$51,557,549
Scenario 5	casinos at major hotels and all small hotels	597,531	59.84%	160,422	26.80%	75.90%	70.10%	\$51,557,549
Scenario 6	1 casino downtown Hamilton and at major hotels	597,531	59.84%	174,437	29.20%	77.30%	71.40%	\$56,061,765



While we have not developed full economic impacts for scenarios 3 (3 casinos plus major hotels), 5 (major and minor hotel casinos), and 6 (one casino in Hamilton and major hotels), the above information provides a good surrogate for economic impact estimation for these scenarios. It should be noted that both scenarios 3 and 6 provide greater impact on hotel revenues and thus would be expected to have a greater economic impact than scenarios 1, 2 and 4. It would however be our expectation, based on the market size and the economics of casino construction, and the requirements of financing and operational costs, that the development of casinos at major hotels and indeed smaller hotels (included in Scenarios 3, 4, 5, and 6) would in the end result in many of the properties choosing not to go forward with casino development with the result that the economic impacts would be reduced. It is our belief that Scenario 6 offers an attractive option in that Bermuda would be guaranteed a major casino in Hamilton and would at the same time also benefit from at least some of the major hotels in this scenario moving forward with casino development. This would result in significantly greater economic impacts than under scenarios 1 or 2 but somewhat less than that shown here for Scenario 4 (assuming all major hotels would develop a casino in that scenario).

The following table provides a complete summary of the economic impacts of the three scenarios analyzed.

**Summary of Economic Impacts** 

	Scenario 1	Scenario 1 Scenario 2		
	1 Casino Downtown Hamilton	3 Casinos- Hamilton, Dockyard, St. Georges	Casinos Only at Major Hotels	
	From Operations and Induced To (Annually recurring impacts			
Income	(rumaan) rooming impact			
Direct	\$52	\$73	\$89	
Indirect and Induced	\$51	\$68	\$85	
Total	\$103	\$140	\$175	
Public Sector Revenue				
Direct	\$13	\$18	\$23	
Indirect and Induced	\$13	\$17	\$2	
Total	\$25	\$34	\$4	
Balance of Payments				
Exports	\$107	\$145	\$18	
Imports	\$38	\$51	\$6	
Net Impact	\$69	\$94	\$11	
Employment				
Direct	855	1177	149	
Indirect and Induced	872	1162	148	
Total	1,727	2,339	2,97	
	From Construction (one year im	pacts)		
Income				
Direct	\$16	\$23	\$1	
Indirect and Induced	\$11	\$16	\$	
Total	\$27	\$38	\$1	
Employment(				
Direct	230	328	16	
Indirect and Induced	160	224	11	
Total	390	552	27	

In addition to the impact on existing properties, the advent of gaming and the added attractiveness it brings to hotel developers considering developing property on the island cannot be ignored. As has occurred in other jurisdictions, it is likely that several of the planned hotel projects currently in hiatus would move forward as a direct consequence of the advent of gaming in Bermuda The presence of gaming offers the prospect of an additional profit center that developers can utilize in raising financing and providing adequate returns to equity holders; hence gaming has been instrumental in other jurisdictions in helping to jumpstart new projects. However, it is very difficult to quantify the economic impacts of these proposed projects in Bermuda without knowledge of the specific economics of each project.

Overall we have estimated that the costs to Bermuda of introducing gaming would total \$4.6 million annually, these would be offset by taxes and a special levy to pay for additional police services and programs to mitigate effects of problem gambling. It is therefore concluded that the positive of introducing gaming to Bermuda outweigh the negatives in terms of economic impact by a significant margin.



# APPENDIX A: DEVELOPMENT OF INPUT-OUTPUT MODEL

The economic impact of tourism expenditures on the Bermuda economy is estimated using the Bermuda Tourism Model developed by Canmac Economics Ltd. The Bermuda Tourism Impact Model is a linear input-output model developed within an Excel spreadsheet format. The model consists of the following modules:

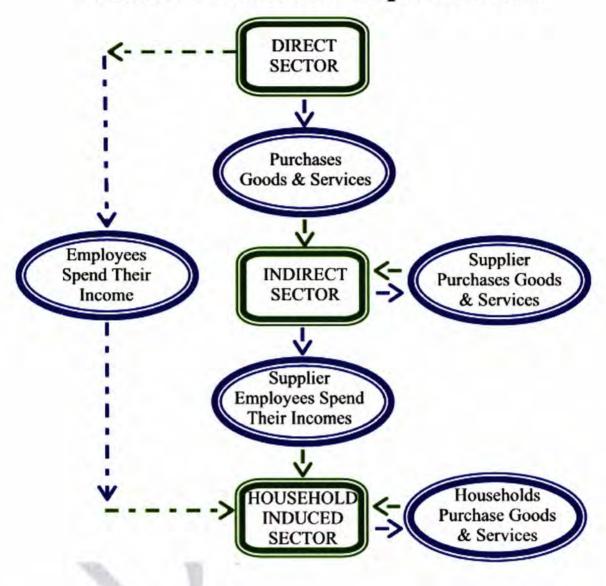
Module 1 - Input Data Module 2 - Analysis

Module 3 - Report Generation

Module 1 provides input data to the model. This is comprised of visitor expenditures by type and number of visitors by type. The heart of the model is Module 2 - the analytical component. The analytical component is made up of a series of matrices that compute the direct, indirect and induced impacts of visitor expenditures. Exhibit 1 provides a schematic of the process.

The first component is the direct effect - it measures the income received in the Bermuda economy by computing the wage bill in each industry that directly supplies the visitor expenditures. For example, for every one million dollars in visitor expenditures on accommodations, some portion is paid out as wages and salaries to those employees working directly within the accommodation industry. A further portion of the accommodation expenditures are paid out to domestic suppliers to the accommodation industry - business services, dry cleaning, etc. This proportion is referred to as the indirect effect. Technically, the indirect effect includes all supplier rounds (i.e., suppliers of suppliers, etc.). The present version of the model only includes the first round suppliers. The indirect suppliers also employ labour and pay wages. The income received from this effect is the indirect income.

**Exhibit 1: Economic Impact Process** 



Households that receive income from the direct and indirect effects then respend the money in the local economy, thereby creating further income as the household expenditures pay the wages of retail workers, etc. This income effect is referred to as the induced effect. Module 2 also contains a set of relations to measure the fiscal impact of visitors. The development of the Bermuda Tourism Input-Output Impact Model included the various government fiscal revenue (tax) generators. The model uses "effective" tax rates. An effective tax rate is not the published rate but a calculation of a rate that would include tax concessions or exemptions. An example of this would be payroll tax, the published rate being 13.5% for one payroll group, 9.75% for another group and so on. This type of structure makes it difficult to assess the fiscal impact of payroll unless the

payroll information by group is known. To allow for the various rates and concessions/exemptions, the effective payroll tax rate is calculated by dividing government payroll tax revenue in the latest year by total personal income for the same year, thus yielding an effective tax rate. Module 3 contains several output tables generated from the Bermuda Tourism Model that describe the estimated impacts of tourism expenditures on the Bermuda Economy. Those tables are included in Appendix A of this report and include: Table 8 - The Overall contribution (Direct + Secondary) made by Tourism to the Economy of Bermuda Table 9 - The Impact of Tourism Expenditures on Income, Public Sector Revenues, and Imports by Type of Visitor Table 10 - The Impact of Tourism on the Balance of Payments



## **Section VIII: Forums**

## INTRODUCTION

At the request of the Gaming Task Force, The Innovation Group assisted in the presentation of materials related to our overall engagement to the public during three forums conducted in the evenings on April 21, 22, and 23 of 2009. The forums were conducted on the west, central, and east end of the island with announcements being made through newspaper and television advertisements. The objective was to gain feedback from the public and answer questions about the gaming industry as they relate to the scope of work.

The Innovation Group's role as it relates to this project and within the public forums was to answer questions as they relate to the dynamics of the gaming industry rather than to debate the political or moral questions that some people have. These questions will ultimately need to be answered by Bermudians. It should be noted that while many societies that have considered gaming have moved forward, some have specifically chosen not to. These include Utah in the United States of America, most nations in the Middle East, and parts of central Africa.

The following comments are related to questions, observations, and feedback gathered during those public forums. Maters which seemed to be of particular public importance, as represented by the number of citizens who commented on those topics and which can be answered based on the dynamics of the gaming industry are presented below.

## Further Development of Tourism Product

Several hoteliers, members of the Bermuda Hotel Association, and citizens discussed the competitiveness of the tourism product. It was noted that with very few exceptions no substantial investment has been made in the hotel product on Bermuda. In addition, whereas evening entertainment was substantial, it has declined substantially therefore leaving a void in the tourism offering that competing markets do not have.

These comments are reflected in the available statistics. Specifically, tourism growth in Bermuda has been negative in many years, and overall has declined both in absolute terms and as a share of the Caribbean market. Surveys in the United States show that between 25% and 27% of Americans consider the gaming amenity when selecting a leisure destination. In Caribbean locations that have introduced gaming visitation growth has exceeded that of the region.

It was mentioned that 80% of Americans feel that gaming is an acceptable form of entertainment for themselves or others. This is not to say that the other 20% of Americans are offended by gaming or chose to only travel to destinations that do not offer casino gaming, which was suggested as a potential market niche for Bermuda.

One primary question of our research was whether or not casino gaming would induce tourism. We found that, with low tax rates developers and operators make substantial investments in casinos that ultimately either coincide or at least lead to tourism growth and subsequent investment in the tourism offering.

## Waterfront Development

The point was made that the presence of a casino in downtown Hamilton could help anchor the area and anchor the new waterfront development. Due to the high levels of visitation, casinos do attract a significant number of guests and therefore a lot of surrounding businesses benefit. One way to encourage that cross-visitation has been devised by a U.S. based operator that allows patrons to redeem credit from their rewards program in surrounding businesses.

## Magnetic Cards

It has been mentioned several times that technology could be used to control casino admissions. This could be used to limit the number of entries, limit who is able to enter the casino, or even how much an individual is allowed to play.

Some nations do not allow domestic citizens to gamble in local casinos. This includes the Bahamas, Vietnam, and most casinos in Korea. In the cases of Vietnam and Korea, this has dramatically reduced the level of investment and the subsequent ability to induce tourism. Local play provides additional revenue which helps to justify more substantial investments, which in turn are more effective at inducing tourism.

Registration is a different matter. Some casinos in Europe and Russia require registration. The challenge is that some gamers prefer to be anonymous and on the margin some people who would otherwise play do not. In Korea, where one casino is allowed to accept domestic gamers and each citizen is allowed two entries per month, gamers regularly find ways to circumvent the existing controls.

However, this is not to say that the technology does not exist to institute a system of controls supported by technology that could be used to implement controls. One card many casinos offer is a player's club card. This card could likely be used for both purposes.

## Ambient Machines

Several parties that had interests in the machines that were popular in bars and taverns indicated that these machines should be returned and regulated. This is much more of a political issue, but it is addressed herein in terms of the industry dynamics. While ambient machines appear to have been popular, we were unable to find an instance where machines offered in a fragmented nature were able to develop the critical mass necessary to attract additional tourists at the distances required in Bermuda's case. To the extent that tourists did play these machines, Bermuda was never known as a gaming destination and all play appears to have been incidental. As tourism development is a major driver

for gaming, ambient machines do not appear to meet the criteria set forth in our engagement. Furthermore, these machines can be more costly to regulate due to their fragmented nature.

## Public Revenue Sharing

It was suggested that casinos are taxed at 50% and that taxes are distributed to each Bermudian registered to vote. While Native American tribes in the United States do distribute some profits to their members, we know of no jurisdiction where the impact of casino revenue went beyond proposals for tax relief. More importantly, however, is that a tax rate at this level would be excessive in Bermuda and would likely lead to lower levels of investment and lower revenue.

## Social Impacts

Social impacts were a concern of many citizens. Incidences of problematic and pathological gaming and the impact that those individuals can have on society are explored in great depth in our Social Impact Assessment. Our analysis includes further cost estimates for emergency services, public health care, and regulatory bodies.

Utilizing data and research from numerous other jurisdictions and both proprietary and published third party research, The Innovation Group evaluated the various social implications and estimated certain costs that might incur should legalized gaming be The Committee on the Social and Economic Impact of Pathological Gambling of the National Research Council and the Harvard Medical School 1997 Metaanalysis determined that 0.9 percent of for pathological gamblers and 2.0 percent of adults for the past-year problem gambling designation. 134 This estimate, which is consistent with other studies, notes that an estimated total of 2.9% of the population in Bermuda will have challenges with gaming. Many medical professionals note that these individuals are already part of the population and most are already gaming. Moreover, it has been estimated that approximately half of these people suffer from co-morbidity, meaning that self-abusive behavior extends beyond gaming to other existing outlets including alcohol and drugs. In almost all instances, gaming industry regulations establish self-exclusion lists so that, as those with challenges are identified, they are not permitted to enter casinos. In addition, a percentage of gaming taxes is typically earmarked for the treatment of those affected.

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<sup>&</sup>lt;sup>134</sup> Shaffer, H.J., Hall, M.N., and Vander Bilt, J. Estimating the Prevalence of Disordered Gambling in the United States and Canada: A Meta-analysis. Boston: President and Fellows of Harvard College, 1997, p.