

JAPAN

White Paper: Japan Integrated Resorts

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CLAIRVEST



I. EXECUTIVE SUMMARY

The next emerging integrated resort market is on the horizon in Japan. After years of debate, Japan is in the process of developing legislation to create the regulatory and market structure for integrated resorts (“IR”). While the debate still has several issues to work through, Japan has the potential to be one of the largest gaming markets in the world with a revenue potential of \$24.2 billion, assuming fully developed IRs are introduced in six regions. Global Market Advisors (“GMA”) completed a detailed analysis that examined the current gaming market, the prospective legislation, components of the RFP process, potential sites, definition of an integrated resort, and the full market potential.

MARKET POTENTIAL

While the number of sites has not officially been determined, it is widely viewed that there will be an initial one to three IRs in the first round of RFPs, with a second round beginning after the initial IRs have opened and demonstrated their benefits to Japan. GMA would suggest that if tourism is one of the main reasons for IR expansion, as it was in Singapore, that one of the sites, such as Yumeshima Island in Osaka, be considered as a host site for multiple IRs. Three or more operators would create critical mass and a more dynamic tourist destination, allowing the Osaka Strip to compete with destinations such as Las Vegas, Macau, and Singapore. If this concept were adopted, GMA would still advocate that additional regional concessions be allowed to further stimulate tourism and economic growth.

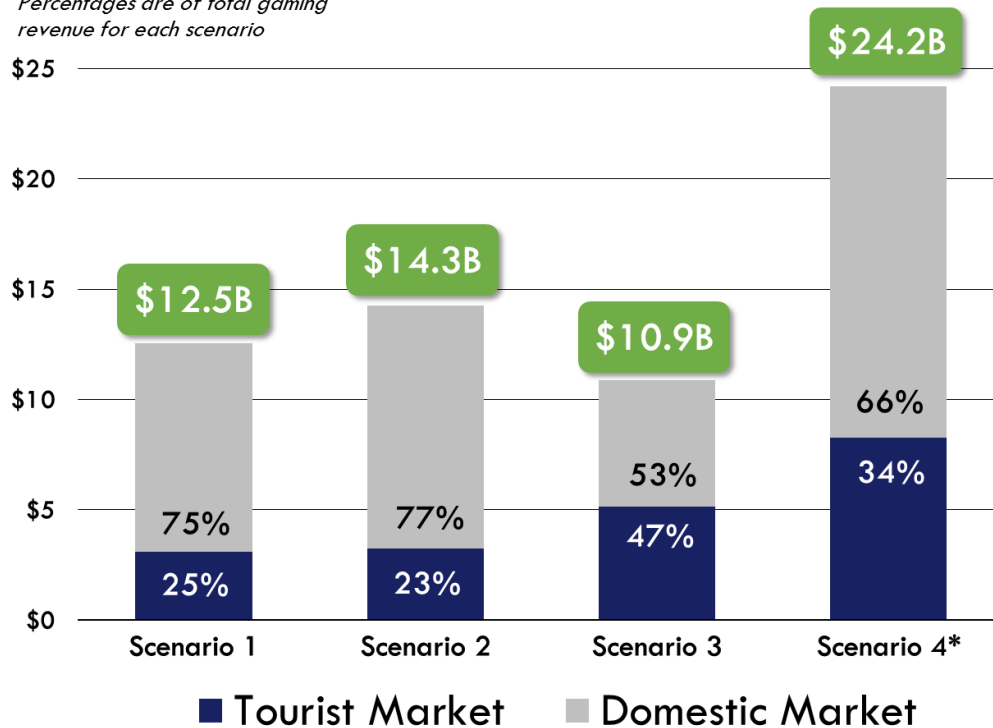
Global Market Advisors developed a series of models that took into account the sites currently under discussion and as outlined in this white paper. The gaming market revenue potential ranges from an initial market of two large integrated resorts at \$12.5 billion in revenue to a full build-out of six different sites at \$24.2 billion. GMA tested four different scenarios, including a scenario in which several IRs are developed on Yumeshima Island in Osaka. This scenario would generate an estimated \$10.9 billion on the single site assuming multiple operators. In addition, this scenario would allow for the largest capture of gaming revenue from the tourism market with 47% of gaming revenue expected to stem from international travelers in this scenario. These numbers further confirm that Japan has the capacity to be one of the largest gaming markets in the world, providing substantial economic and social benefits for the local population. This is assuming that legislators follow best practices in the IR industry.



Japan IR Gaming Revenue Potential

Gaming Revenue (In USD Billions)

Percentages are of total gaming revenue for each scenario



Source: Global Market Advisors

Note: *Scenario 4 projected year is 2030, Scenarios 1, 2, & 3 are 2025

Scenario 1: Sites in Osaka and Yokohama

Scenario 2: Sites in Osaka, Tokyo, Sasebo, and Hokkaido

Scenario 3: Osaka Strip (Multiple Operators)

Scenario 4: Sites in Tokyo, Osaka Strip, Sasebo, Sendai, Yokohama, and Hokkaido

One issue critical to the development of all integrated resort sites is that the regulatory and RFP structure does not constrain operators by mandating an investment floor or specific space allocation requirements for gaming and non-gaming amenities. Operators should be able to design, invest, and build out their facilities based on the market environment and demand. However, a balance must be developed that ensures that once an operator commits to the project through their RFP submission, they should remain consistent from concept to final build-out. Any deviations in the scope of the project would need to be approved through its government partner.



IR EDUCATION

Through conversations with Japanese stakeholders and market research, it became clear that the public needs a general understanding of the components of an integrated resort. Education will need to occur both by operators and the government to look at a cadre of existing and strong examples of IRs that will highlight how the casino, while centric to the model, only encompasses a small footprint of the overall facility.

GMA's white paper evaluates existing IRs developed by several international operators who are currently interested in Japan. This portion of the white paper is provided to help the reader understand the components and size of properly developed integrated resorts. With this explained, GMA believes it will help improve the overall perception of integrated resort style casino gaming amongst the general public. Additional educational efforts will be necessary to help highlight the positive impact that an IR can bring to the market in terms of tourism, investment, job creation, economic development, and additional revenue.

THE IR DEVELOPMENT PROCESS

The Japanese National Diet is in the midst of working through the logistics of the regulatory structure. Prime Minister Shinzo Abe stated in early April 2017, "The world's highest standards of casino regulations will be introduced, and policies to deal with issues like gambling addiction will be addressed. This will create clean, Japanese-style integrated resorts." The first bill that authorized the process to write the legislation for casinos and IRs passed in December 2016. By the end of 2017, it is anticipated that the second bill that writes the legislation governing IRs will pass and is expected to define a clear two-step process.

The first step will be an internal process to identify the cities and prefectures that have an interest in hosting IRs. Upon completion and evaluation by the Diet in determining the appropriate locations, estimated to be complete by Q3 2018, the second step will begin. It is anticipated that this step will be an RFP process, organized by the chosen prefectures with the winners chosen by Q3 2019. With the current timetable of events in the RFP selection, as well as the development timeline of a project of this scale, GMA believes that 2023 will be the first potential year for an integrated resort to open.

GMA anticipates that this will be the most competitive RFP process since Singapore awarded its two IRs over ten years ago. Based on discussions with local constituents, it is widely believed that operators who wish to submit a bid and compete in the Japan market will be well advised to have a local partner as part of their overall project. GMA believes that potential bidders will face a steep climb if they try and "go it alone" without a local partner.



The debate over the second IR bill will highlight the regulatory structure, number of IRs, selection process, and the importance of responsible gaming for the operators. The Singapore and Nevada regulatory structures will serve as a baseline for most of Japan's regulatory framework. Japan will need to balance a strong regulatory environment while allowing operators to build iconic facilities that allow for the full market potential to be realized. This would include not placing a government-mandated limit on the size of the gaming space.

RESPONSIBLE GAMING

Responsible gaming and social safeguards has been defined as one of the biggest issues to address in the second IR bill. This issue has been top-of-mind to the public and legislators as the latter continue to debate the expansion of gaming. It is expected that operators submitting proposals will be evaluated on responsible gaming initiatives carried out in other major jurisdictions, in addition to their development and revenue projections. Corporate social responsibility will be a focus as well, including operator's existing commitment to offer an environment of responsible gaming and serving as a good corporate citizen in their host communities.

GMA believes that many, if not most of the problem gambling concerns in Japan, will slowly fade as the IR process in Japan continues to evolve. Many international operators have experience and sensitivity to this issue, and as has been demonstrated in Singapore, the problem gambling treatment, education, and prevention communities will also be strengthened with proper funding and regulation. As the paper outlines, with IRs, "the notion that problem gambling rates will simply and automatically increase over time, and in a linear fashion, has been debunked."

Any responsible gaming programs developed in Japan should be evidence-based, and should focus on all (IR-based and non-IR-based) forms of gambling in Japan. One of the biggest responsible gaming issues to address remains the issue of entry levies for those patrons who wish to gamble in casinos, similar to that which Singapore currently has in place for the local patron market. GMA has not identified any research that indicates that entry levies reduce problem gambling, and some industry experts have suggested that it encourages problematic "chasing" behavior. Wherever possible, Japanese stakeholders should continue to seek sound research for policymaking -- not only with a potential entry levy, but also with all measures that affect the local community and patron base.



II. DEMOGRAPHICS & ECONOMY

POPULATION

OVERVIEW

Japan's total population in 2015 was approximately 127.0 million people, which ranked as the eleventh highest in the world at that the time. Japan's population grew at an average annual rate of 1.19% from 1910 to 1980, marking a 70-year period of strong growth, adding about 51.0 million people to reach 117.0 million in 1980. Conversely from 1980 to 2015, the population growth decreased dramatically, slowing to an average annual rate of about 0.22%, and only reaching 127.0 million. According to the 2015 census, the population decreased from its peak in 2010 of 128.1 million. This was the first decrease since the decline posted between the 1940 census and 1945 census. Future population decreases are expected due to multiple factors. Specifically, birth and fertility rates have fallen below the necessary thresholds required to maintain population levels. Japan's population is also aging at an accelerated rate. As the proportion of older people continues to increase, mortality rates have also trended upward. Additionally, Japan has not had any gains in population attributable to immigration and that trend is likely to continue. According to projections made by Japan's health ministry, the population is estimated to drop to 116.6 million and 88.1 million in 2030 and 2065, respectively.

PREFECTURE TOTAL & ADULT POPULATION

Japan consists of 47 administrative jurisdictions called prefectures. Depending on the prefecture, each is further subdivided into smaller jurisdictions consisting of cities, districts, towns, and villages. According to the 2015 census, there were 24 prefectures with 1.5 million people or more, accounting for approximately 80.5% (101.9 million people) of the overall Japanese population. The remaining 23 prefectures are comprised of about 24.7 million people in total or roughly 19.5% of the overall population.

The following table details 2010 and 2015 population figures and estimated future population figures for subject years 2025 and 2030, arranged from most to least populated prefecture. GMA prepared projections as detailed later in this report, for 2025 and 2030 according to an assumed development timeline for integrated resorts in Japan.



#	Prefecture	Total Population by Prefecture				Adult Population (Age 21+) by Prefecture			
		2010	2015	2025 Est.	2030 Est.	2010	2015	2025 Est.	2030 Est.
1	Tokyo	13,159,388	13,349,453	13,178,672	12,956,522	10,960,804	11,179,551	11,209,767	11,116,725
2	Kanagawa	9,048,331	9,147,970	9,009,667	8,833,192	7,335,537	7,477,371	7,543,728	7,471,275
3	Osaka	8,865,245	8,808,282	8,410,039	8,118,391	7,177,675	7,199,931	7,060,354	6,882,276
4	Aichi	7,410,719	7,470,407	7,348,135	7,213,147	5,899,548	5,991,180	6,027,787	5,972,462
5	Saitama	7,194,556	7,206,014	6,991,046	6,795,904	5,804,312	5,880,611	5,854,194	5,745,189
6	Chiba	6,216,289	6,192,487	5,987,027	5,806,411	5,059,417	5,081,971	5,025,403	4,920,662
7	Hyogo	5,588,133	5,532,477	5,268,695	5,088,284	4,501,725	4,502,240	4,400,973	4,293,798
8	Hokkaido	5,506,419	5,361,296	4,959,984	4,719,100	4,537,212	4,478,538	4,251,340	4,085,264
9	Fukuoka	5,071,968	5,045,624	4,855,724	4,718,154	4,072,130	4,090,203	4,017,500	3,940,818
10	Shizuoka	3,765,007	3,696,499	3,480,333	3,342,558	3,050,285	3,017,594	2,903,618	2,815,588
11	Ibaraki	2,969,770	2,921,890	2,764,115	2,661,094	2,395,610	2,383,850	2,314,762	2,250,458
12	Hiroshima	2,860,750	2,825,397	2,688,800	2,598,805	2,308,406	2,298,599	2,232,101	2,176,817
13	Kyoto	2,636,092	2,614,519	2,499,460	2,418,108	2,135,178	2,140,096	2,095,756	2,046,347
14	Niigata	2,374,450	2,297,441	2,112,473	2,009,105	1,939,381	1,898,310	1,786,674	1,713,581
15	Miyagi	2,348,165	2,305,578	2,210,121	2,140,710	1,892,516	1,885,747	1,849,577	1,809,108
16	Nagano	2,152,449	2,090,658	1,937,623	1,851,124	1,740,654	1,704,237	1,618,954	1,561,967
17	Gifu	2,080,773	2,035,473	1,907,818	1,829,589	1,669,004	1,647,856	1,586,104	1,535,891
18	Gunma	2,008,068	1,971,225	1,857,908	1,787,483	1,617,923	1,603,113	1,551,021	1,506,612
19	Tochigi	2,007,683	1,973,738	1,867,192	1,799,782	1,624,345	1,611,626	1,558,875	1,517,129
20	Fukushima	2,029,064	1,912,609	1,780,166	1,684,358	1,633,295	1,566,884	1,496,221	1,430,529
21	Okayama	1,945,276	1,913,145	1,811,274	1,749,284	1,564,985	1,550,994	1,499,829	1,460,015
22	Mie	1,854,724	1,821,273	1,714,523	1,649,474	1,495,157	1,481,513	1,428,850	1,387,985
23	Kumamoto	1,817,426	1,775,543	1,666,017	1,603,413	1,459,550	1,438,735	1,374,921	1,334,089
24	Kagoshima	1,706,242	1,649,674	1,521,991	1,454,431	1,372,980	1,340,193	1,258,169	1,212,368
25	Yamaguchi	1,451,338	1,398,700	1,275,187	1,207,526	1,189,368	1,154,430	1,072,654	1,023,619
26	Ehime	1,431,493	1,383,462	1,269,451	1,206,403	1,168,477	1,139,169	1,067,788	1,023,747
27	Nagasaki	1,426,779	1,370,896	1,250,016	1,184,609	1,150,064	1,119,170	1,045,748	1,000,074
28	Shiga	1,410,777	1,419,654	1,398,322	1,375,179	1,110,178	1,127,064	1,137,804	1,131,009
29	Okinawa	1,392,818	1,410,269	1,414,154	1,404,887	1,047,233	1,075,165	1,109,373	1,115,244
30	Nara	1,400,728	1,370,353	1,279,718	1,222,563	1,129,257	1,118,961	1,075,974	1,037,857
31	Aomori	1,373,339	1,305,510	1,161,431	1,085,119	1,122,543	1,085,084	996,517	940,223
32	Iwate	1,330,147	1,266,388	1,139,825	1,072,339	1,085,454	1,048,284	966,877	917,409
33	Oita	1,196,529	1,169,457	1,093,634	1,049,965	973,653	959,554	913,179	883,560
34	Ishikawa	1,169,788	1,152,926	1,096,170	1,059,630	941,382	935,784	911,375	889,388
35	Yamagata	1,168,924	1,116,236	1,005,850	949,292	954,402	921,760	849,706	808,405
36	Miyazaki	1,135,233	1,107,322	1,033,671	991,365	911,482	897,134	853,293	825,196
37	Toyama	1,093,247	1,063,918	985,889	940,070	894,673	876,279	831,256	799,924
38	Akita	1,085,997	1,023,051	893,224	827,462	907,048	865,292	773,252	722,224
39	Wakayama	1,002,198	961,378	869,182	819,680	818,379	794,397	738,296	702,748
40	Kagawa	995,842	969,359	899,859	859,827	811,108	794,111	752,503	725,725
41	Yamanashi	863,075	837,525	775,908	741,077	694,245	683,536	653,436	630,256
42	Saga	849,788	827,826	774,676	744,863	674,569	663,925	636,034	616,916
43	Fukui	806,314	784,800	731,030	700,185	647,895	636,651	607,391	587,275
44	Tokushima	785,491	755,619	686,332	648,962	646,542	628,083	583,423	556,541
45	Kochi	764,456	729,679	654,741	615,642	630,487	606,986	556,514	527,797
46	Shimane	717,397	687,105	621,882	588,227	586,634	566,369	521,355	496,863
47	Tottori	588,667	567,193	519,861	494,364	477,517	464,341	433,863	416,224
TOTAL		128,057,352	126,597,298	120,658,816	116,617,659	103,820,221	103,612,470	101,034,088	98,565,175
Source: National Institute of Population & Social Security Research Japan, GMA									



The ten most populated prefectures consist of Tokyo, Kanagawa, Osaka, Aichi, Saitama, Chiba, Hyogo, Hokkaido, Fukuoka, and Shizuoka, totaling approximately 71.8 million or about 56.7% of the total population in 2015. Each of these prefectures is expected to decline in population and fall to under 67.6 million people in total by 2030. Additionally, the adult population (defined as age 21 and over) in each of the top ten prefectures is 80.0% or more of the total population. Tokyo and Hokkaido adult proportions are estimated to reach almost 85.0% and 86.0%, respectively in 2025.

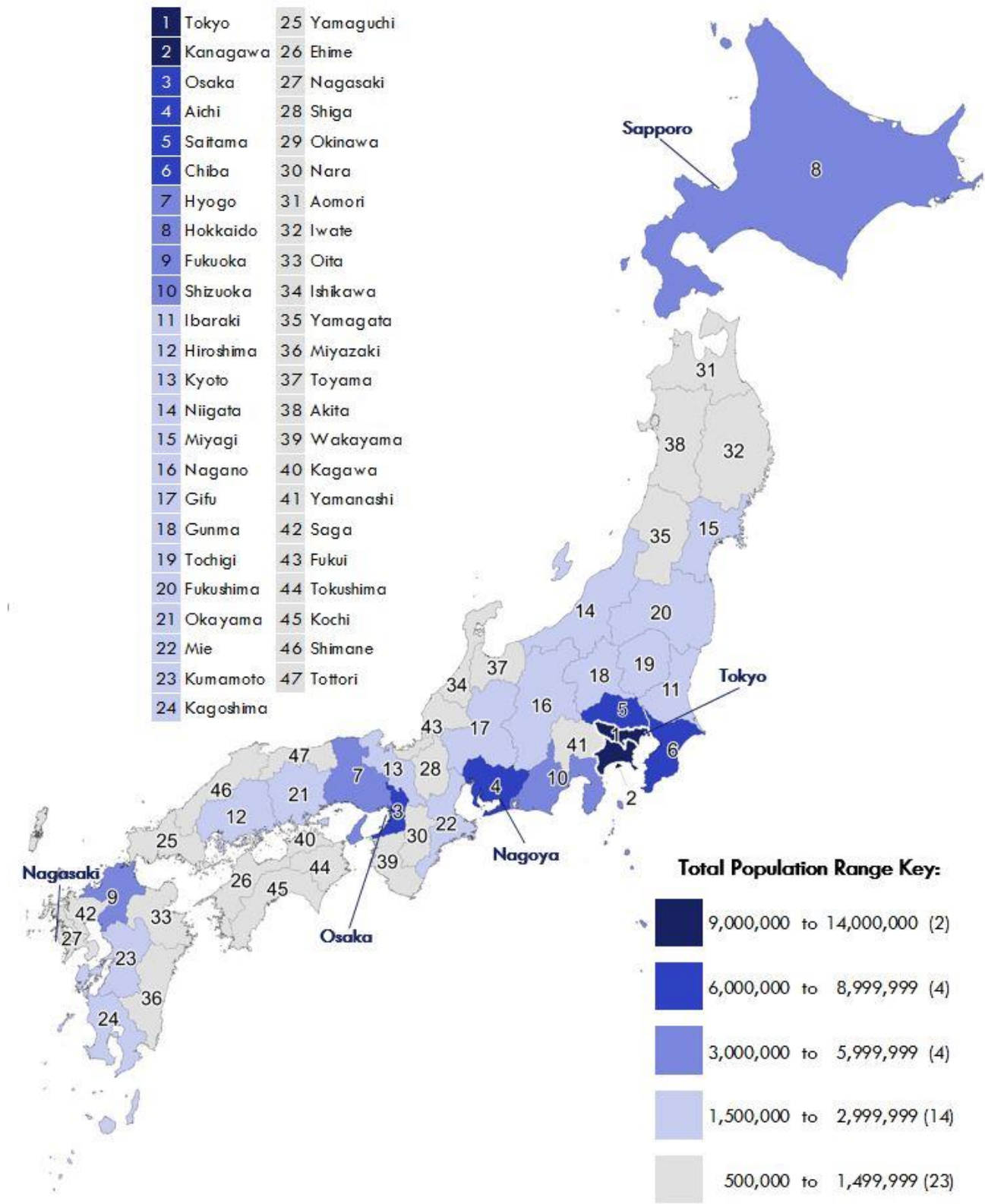
Overall, Japan's population is projected to decrease, including each prefecture in varying compound annual growth rates ("CAGR"), ranging from -0.03% to -1.40%. Japan's total population is expected to decrease by an average of 0.55% each year between 2015 and 2030, equating to a 7.9% total decrease or 10.0 million people. The adult population is also expected to decrease, but at a slower pace compared to the total population or -0.33% each year. By 2030, the adult population is expected to reach almost 85.0% of the total population from 81.1% in 2010, indicating the aging population in Japan. The following table details this analysis.

Population Summary & Trend						
	2010	2015	2025 Est.	2030 Est.	'15 - '30 CAGR	'15 - '30 Change
Adult	103,820,221	103,612,470	101,034,088	98,565,175	-0.33%	-4.87%
Total	128,057,352	126,597,298	120,658,816	116,617,659	-0.55%	-7.88%
% Adult	81.07%	81.84%	83.74%	84.52%		
Source: National Institute of Population & Social Security Research Japan, GMA						

The map of Japan on the following page details each prefecture by number and associated total population range in 2015.



PREFECTURE TOTAL POPULATION HEAT MAP



REGIONAL TOTAL & ADULT POPULATION

Japan is aggregated into several broader regions. These regions include Kanto, Kansai, Chubu (sub-regions Tokai and Hokuriku), Kyushu, Tohoku, Chugoku, Hokkaido, Shikoku, and Okinawa. The Kanto region is by far the most populous with nearly 42.7 million people, including over 35.2 million adults in 2015. The regions of Kansai and Chubu are the next most populated regions with 22.5 million and 21.4 million, respectively. Kyushu had a population of 13.0 million in 2015 with 10.5 million adults residing in the region. These four regions combined contain over 78.7% of the total population in Japan or nearly 100.0 million people. Each region is made up of over 80.0% adults with Okinawa as an exception at 76.2% in 2015. The adult composition is expected to increase in each region to approximately 85.0% or more by 2030 and Okinawa will approach 80.0% adults. The five regions of Chubu, Kyushu, Tohoku, Chugoku, and Hokkaido are expected to sustain double-digit decline of more than 10.0% in total population from 2015 to 2030. On a percentage basis, the Kanto and Chubu regions are expected to shrink the least, although still losing 2.1 million and 2.7 million people, respectively.

The following table details 2010 and 2015 population figures and estimated future population figures for subject years 2025 and 2030, arranged from most to least populated region.

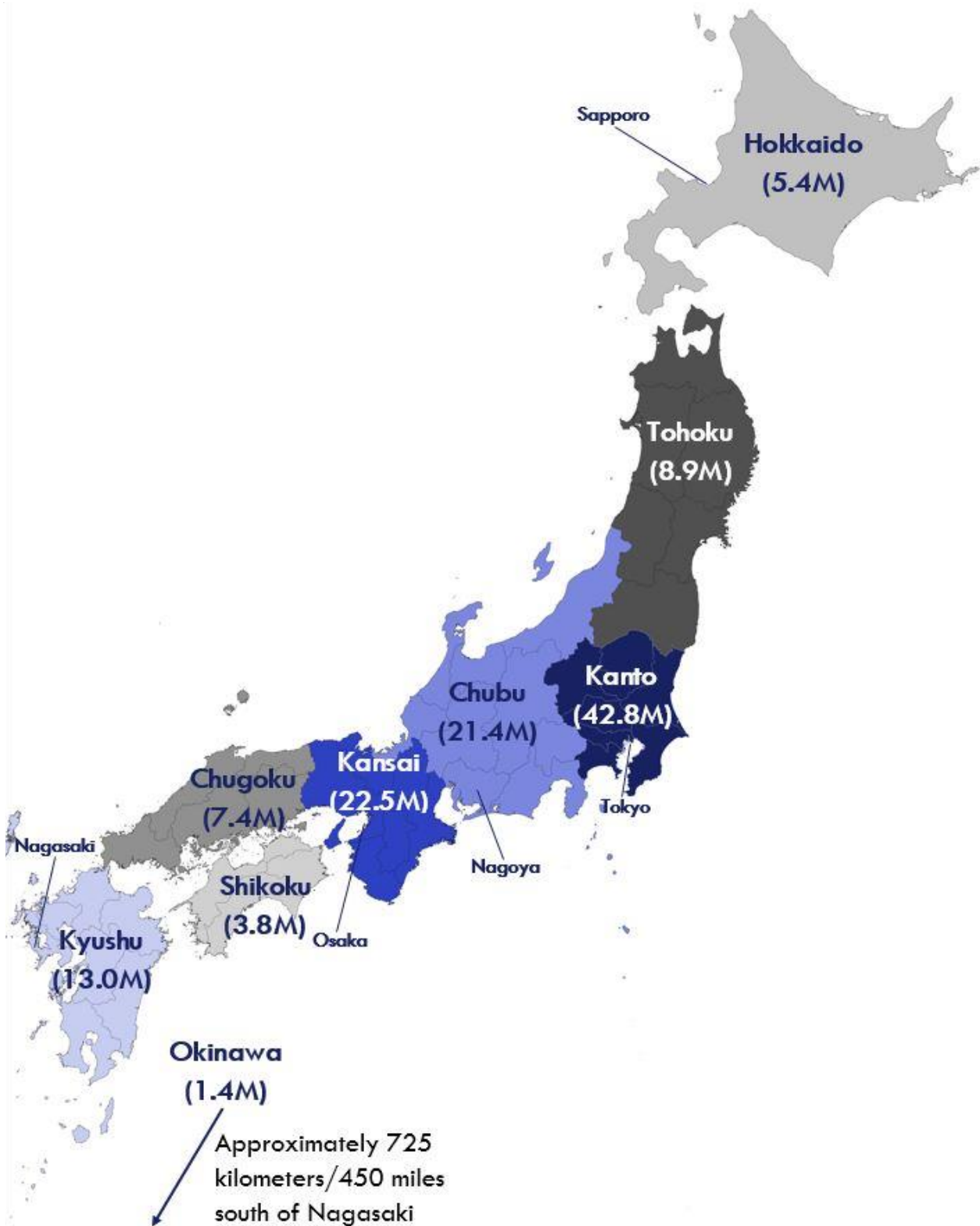
Region	Total Population by Region				Adult Population (Age 21+) by Region			
	2010	2015	2025 Est.	2030 Est.	2010	2015	2025 Est.	2030 Est.
Kanto	42,604,085	42,762,777	41,655,627	40,640,388	34,797,948	35,218,094	35,057,750	34,528,048
Kansai	22,757,897	22,527,936	21,439,939	20,691,679	18,367,550	18,364,202	17,938,007	17,482,019
Chubu (Tokai)	14,119,574	14,039,904	13,512,194	13,126,371	11,313,083	11,340,166	11,170,946	10,954,197
Chubu (Hokuriku)	7,596,248	7,389,743	6,863,185	6,560,114	6,163,985	6,051,260	5,755,649	5,552,135
Kyushu	13,203,965	12,946,342	12,195,729	11,746,800	10,614,427	10,508,914	10,098,843	9,813,021
Tohoku	9,335,636	8,929,372	8,190,617	7,759,280	7,595,258	7,373,050	6,932,150	6,627,898
Chugoku	7,563,428	7,391,540	6,917,004	6,638,206	6,126,910	6,034,733	5,759,802	5,573,539
Hokkaido	5,506,419	5,361,296	4,959,984	4,719,100	4,537,212	4,478,538	4,251,340	4,085,264
Shikoku	3,977,282	3,838,119	3,510,383	3,330,834	3,256,615	3,168,348	2,960,228	2,833,809
Okinawa	1,392,818	1,410,269	1,414,154	1,404,887	1,047,233	1,075,165	1,109,373	1,115,244
TOTAL	128,057,352	126,597,298	120,658,816	116,617,659	103,820,221	103,612,470	101,034,088	98,565,175

Source: National Institute of Population & Social Security Research Japan, GMA

The map of Japan on the following page details each region and associated total population in 2015.



JAPAN REGIONAL MAP BASED ON 2015 TOTAL POPULATION



INCOME

GMA compiled and analyzed historical annual household income from 2003 to 2016 by region to understand past and current income trends in Japan. By utilizing this analysis, GMA made assumptions regarding future growth rates by region to project future income levels.

In 2016, the Kanto region, which includes Tokyo and Yokohama, had an average annual household income of ¥5.8 million or \$53,263 USD. GMA projects income levels in this region will remain steady in future years growing by 0.21% per year. The Kansai region which includes Osaka, had an income level of ¥5.5 million or \$50,992 USD and is projected to decrease slightly in the future. The Chubu region lies in between Kanto and Kansai and is subdivided into the Tokai and Hokuriku regions. Income levels in Chubu were slightly higher in 2016 compared to Kanto and Kansai and are expected to moderately decrease. The southern region of Kyushu contains Fukuoka and Sasebo. Income levels for Kyushu in 2016 were ¥5.4 million or \$49,516 USD with income expected to grow the most by 0.79% per year. The regions of Chugoku and Shikoku are located in between Kansai and Kyushu with comparable income levels, but significantly higher income reduction rates. Sendai is located in the Tohoku region and had an average household income of just under ¥5.0 million or \$45,890 USD and is expected to decrease by 1.89% per year. Income in Hokkaido was about ¥5.0 million or \$46,046 USD and is also expected to decrease at a relatively higher pace of 2.37% per year.

GMA notes that income levels do not vary greatly from region to region with the exception of Okinawa. This is likely due to the fact that these are large and densely populated regions with highly diversified labor forces. Additional research shows that the average household income in Japan is \$53,000 USD or ¥5.4 million. This research is indicative that the income levels presented in this report are in-line with the published research community.

The following table details average annual household income in Japan by region and projected income levels for the subject years of 2025 and 2030. For the purposes of this report, GMA assumed a constant exchange rate in future years for currency conversion.



Average Annual Household Income by Region							
	2016	2025	2030	2016	2025	2030	Assumed CAGR
Kanto	¥5,776,920	¥5,889,456	¥5,952,920	\$53,263	\$54,301	\$54,886	0.21%
Kansai (Kinki)	¥5,530,596	¥5,427,426	¥5,370,943	\$50,992	\$50,041	\$49,520	-0.21%
Chubu (Tokai)	¥5,804,772	¥5,463,905	¥5,283,261	\$53,520	\$50,377	\$48,712	-0.67%
Chubu (Hokuriku)	¥5,877,480	¥5,816,063	¥5,782,221	\$54,190	\$53,624	\$53,312	-0.12%
Kyushu	¥5,370,468	¥5,765,816	¥5,997,895	\$49,516	\$53,161	\$55,301	0.79%
Tohoku	¥4,977,192	¥4,190,801	¥3,808,940	\$45,890	\$38,639	\$35,118	-1.89%
Chugoku	¥5,050,860	¥3,736,633	¥3,160,579	\$46,569	\$34,452	\$29,141	-3.29%
Hokkaido	¥4,994,112	¥4,024,790	¥3,570,091	\$46,046	\$37,109	\$32,916	-2.37%
Shikoku	¥5,356,632	¥3,497,853	¥2,760,410	\$49,388	\$32,250	\$25,451	-4.63%
Okinawa	¥3,628,572	¥2,890,755	¥2,547,794	\$33,455	\$26,653	\$23,491	-2.49%
Source: Statistics Japan - Statistics Bureau, Ministry of Internal Affairs and Communications, GMA							

ECONOMIC OVERVIEW

Japan's economy was one of the first to industrialize among Asian countries in the mid nineteenth century. From the outset, the Japanese government empowered the public sector to effect broad infrastructural changes, allowing for private sector growth and cooperation. Following the industrial devastation sustained during World War II, Japan's economy experienced unprecedented and robust growth. With the establishment of The Ministry of International Trade and Industry (MITI) in 1949, the government instituted several impactful policies. These policies led to strong industrial growth from the 1960s into the 1980s, often described as the economic miracle of Japan. As the 1980s came to a close, rising stock and real estate prices gave way to an economic bubble which culminated in the Tokyo Stock Exchange crashing in the early 1990s. Extremely low growth rates ensued for nearly two decades after the early 1990s financial crisis. Despite economic stagnation since 1990, Japan remains a world leader in terms of industrial manufacturing and industrial technology.

Japan is primarily a service-based economy that contributes over 70% to the country's GDP on average each year. Japan's major service sectors include banking, insurance, retail, transportation, and telecom. The industrial economy in Japan contributes roughly 30% to its GDP and is heavily reliant on major industries including automobiles, electronic equipment, machine tools, marine ships, steel, chemicals, textiles, and processed foods. The auto industry in Japan is only second to China in terms of production. Japan is home to many of the highest ranked auto manufacturers in the world including top ranked Toyota, Nissan, Honda, Suzuki, Mazda, and Mitsubishi. Additionally, Japan leads the world in electronics

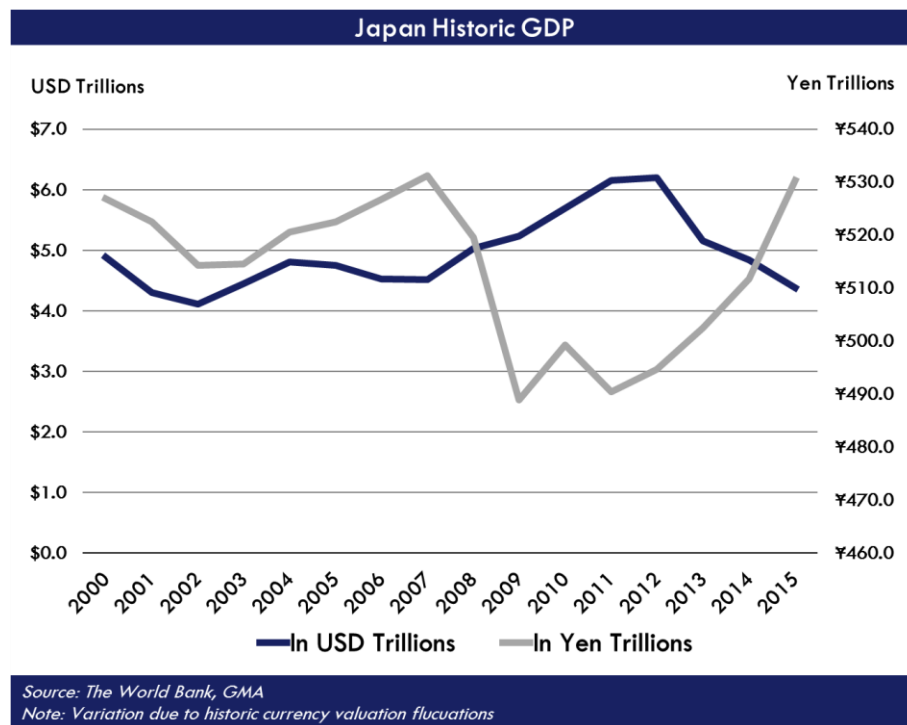


manufacturing and has several of the world's leading companies such as Sony, Casio, Panasonic, Canon, Yamaha, Fujitsu, and Nikon. Today, Japan focuses on advanced technology electronic goods to mitigate increasing competition from China and South Korea. There are several industrial concentrations located throughout Japan:

- Kanto (Tokyo) – Keihin Industrial Region
- Kansai (Osaka) – Hanshin Industrial Region
- Tokai (Nagoya) – Chukyo-Tokai Industrial Region
- Honshu/Shikoku (Seto Inland Sea) – Setouchi Industrial Region
- Taiheiyo Belt – long narrow region of industrial centers between Tokyo and Fukuoka
- Northern Kyushu

GDP

As a member country of the G8, Japan is the third largest economy in the world in terms of GDP. Following the economic boom from the 1960s well into the 1980s, Japan maintained the second largest economy from the late 1970s until 2010 when it was surpassed by China. As one of the world's major advanced industrial nations, Japan's economic output grew consecutively from 2007 to 2013 to over \$6 trillion USD. Since peaking in 2013, the GDP has slid back to levels seen in the 1990s and mid-2000s. The following graph illustrates historic GDP levels from 2000 through 2015.



UNEMPLOYMENT

Overall, Japan has had a relatively low unemployment rate with an average annual unemployment rate at just over 3.0% in 2016. If one looks over a period from the 1960's to today, the rates have been as low as 1.15% during the period of rapid growth of the 1960's, to a high of 5.4% in the early 2000's, when Japan went through its financial restructuring. Historically, Japan has had not only low unemployment but also was famous for lifetime employment. While those lifetime job opportunities have diminished, there are still some available where one has the same, permanent job for their entire life. This also speaks to the fact that the Japanese typically do not switch career paths or economic sectors once they have entered into a field. This could be a potential issue for a future integrated resort trying to find workers for positions that have not been available previously in Japan.

In each region, the unemployment rate has progressively decreased from 2012 through 2016. Comparatively, the Hokkaido and Kinki (Kansai) regions have improved the most over the time period from roughly 5.1% in 2012 to about 3.5% in 2016. For the Kanto region, unemployment rates were broken down by two regions, Southern and Northern. The Northern Kanto region enjoys a slightly lower unemployment rate when compared to the Southern Kanto region (2.9% vs. 3.2%, respectively, in 2016). In the Chubu region, which includes Tokai and Hokuriku, the unemployment rate has been more stable holding around 3.0% from 2012 through 2016. In 2016, four of the regions had annual unemployment below 3.0% and the remaining major regions were below 3.6%. The following table details historic unemployment rates by region and for the past five years.

Average Annual Unemployment By Region					
	2012	2013	2014	2015	2016
Hokkaido	5.2%	4.6%	4.1%	3.4%	3.6%
Tohoku	4.5%	4.0%	3.6%	3.6%	3.1%
Southern Kanto	4.4%	4.1%	3.5%	3.3%	3.2%
Northern Kanto	3.7%	3.8%	3.2%	3.2%	2.9%
Hokuriku	3.5%	3.4%	3.1%	2.7%	2.7%
Tokai	3.5%	3.3%	2.8%	2.6%	2.5%
Kinki	5.1%	4.4%	4.1%	3.8%	3.5%
Chugoku	3.7%	3.8%	3.3%	3.2%	2.8%
Shikoku	4.2%	3.8%	3.6%	3.2%	3.2%
Kyushu	4.6%	4.5%	4.2%	3.8%	3.2%
Okinawa	6.8%	5.7%	5.4%	5.1%	4.4%
Japan	4.3%	4.0%	3.6%	3.4%	3.1%

Source: Statistics Japan - Statistics Bureau, Ministry of Internal Affairs and Communications



As Japan looks to the development of integrated resorts, stakeholders will need to develop programs for the recruitment, training and development for entry-level positions as well as management positions. While some positions like slot technicians currently exist in the Pachinko industry, other positions such as table game dealers and other gaming centric positions will need specific training to meet the operators' needs. There will also be a need for executive level training in casino gaming and other operations in integrated resorts. This will serve as an opportunity for operators or potentially the government to find training partners with local educational institutions. This may also lead to international partnerships between local colleges and leading hospitality institutions to provide their expertise with executive training and hospitality.



III. JAPANESE TOURISM

VISITATION & ORIGIN

International tourist visitation to Japan has been increasing at very high rates, nearly tripling since 2012 to 24 million visitors in 2016. Driving this unprecedented growth is visitation from Asian countries. Overall, Asian tourists account for well over 80.0% of total visitors. Visitation from each Asian country to Japan has posted soaring double-digit year-over-year (“YOY”) growth. China has been the primary growth driver, increasing by more than 5 million visitors from 2013 to 2016. Specifically, China nearly doubled visitation from 2013 to 2014 and more than doubled from 2014 to 2015. In 2015 alone, 2.6 million more Chinese visitors went to Japan compared to the prior year. As of 2016, Chinese tourists accounted for roughly 27.0% of the total 24.0 million visitors to Japan. The following table details international visitors to Japan by country and year-over-year growth rates.

Historical International Tourism by Country to Japan (Visitors in Millions)										
	2012		2013		2014		2015		2016	
	Visitors	YOY Change	Visitors	YOY Change	Visitors	YOY Change	Visitors	YOY Change	Visitors	YOY Change
Asian										
China	1.4	36.6%	1.3	-7.8%	2.4	83.3%	5.0	107.3%	6.4	27.6%
Korea	2.0	23.2%	2.5	20.2%	2.8	12.2%	4.0	45.3%	5.1	27.2%
Taiwan	1.5	47.5%	2.2	50.8%	2.8	28.0%	3.7	29.9%	4.2	13.3%
Hong Kong	0.5	32.0%	0.7	54.9%	0.9	24.1%	1.5	64.6%	1.8	20.7%
Thailand	0.3	79.8%	0.5	74.0%	0.7	45.0%	0.8	21.2%	0.9	13.1%
Malaysia	0.1	59.7%	0.2	35.6%	0.2	41.4%	0.3	22.4%	0.4	29.1%
Singapore	0.1	27.7%	0.2	33.1%	0.2	20.4%	0.3	35.5%	0.4	17.2%
Philippines	0.1	34.8%	0.1	27.4%	0.2	70.0%	0.3	45.7%	0.3	29.6%
Indonesia	0.1	63.9%	0.1	34.8%	0.2	16.0%	0.2	29.2%	0.3	32.1%
Vietnam	0.1	34.4%	0.1	53.1%	0.1	47.1%	0.2	49.2%	0.2	26.1%
Asia Unclassified	0.1	27.2%	0.1	26.3%	0.2	16.9%	0.2	35.1%	0.1	-38.5%
India	0.1	16.1%	0.1	9.0%	0.1	17.1%	0.1	17.2%	0.1	19.3%
Macau	0.0	-	0.0	-	0.0	-	0.0	-	0.1	-
Israel	0.0	50.2%	0.0	39.0%	0.0	29.9%	0.0	16.6%	0.0	29.9%
Mongolia	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
Turkey	0.0	-	0.0	-	0.0	-	0.0	17.0%	0.0	-1.1%
ASIA TOTAL	6.4	35.2%	8.1	27.0%	10.8	33.3%	16.6	53.9%	20.4	22.6%
US & ROW	1.2	29.0%	1.3	12.5%	1.5	15.0%	1.8	19.5%	2.2	17.3%
Europe	0.8	30.7%	0.9	16.5%	1.0	16.0%	1.2	18.7%	1.4	12.2%
TOTAL	8.4	33.9%	10.4	24.0%	13.4	29.4%	19.7	47.1%	24.0	21.4%

Source: Japan National Tourism Organization

Korea and Taiwan have also posted strong rates from 2012 through 2016. Korean visitors have increased 2.5 times since 2012 as approximately 5.1 million tourists came to Japan. Visitors from Taiwan have also nearly tripled since 2012 with 4.2 million arriving in 2016. Hong Kong and Thailand have also grown 3.5 times since 2012 to 1.8 million and 0.9 million,



respectively. The five countries that visited Japan the most accounted for about 77.0% of the total visitors or 18.4 million in 2016. Overall, international tourism to Japan has grown at an annual average rate of 30.0% since 2012. Future projections are expected to be as high as 60 million visitors by 2030.

TOURISM SPEND

Increased tourism spend has followed the large increases in visitation. In 2016, a total of ¥3.75 trillion was spent in Japan by international tourists. Chinese visitors contributed 39.4% of the total generated in 2016. China more than doubled its spend from 2013 to 2014 and subsequently increased its spend by over 150.0% in the following year (from ¥0.6 trillion to ¥1.4 trillion in 2015). Since that record year, China's spend slightly increased by 4.1% in 2016. Tourists from Taiwan, South Korea, Hong Kong, US, Thailand, and Australia combined for a total spend of ¥1.6 trillion in 2016. This combined total is just over China's spend alone of ¥1.5 trillion. Since 2012, tourist spend generated by these seven countries has grown at an impressive double-digit year-over-year growth rates. Overall, spend has increased more than threefold from ¥1.1 trillion in 2010 to ¥3.75 trillion in 2016. According to published reports, it is estimated that tourism spend in Japan could reach ¥15.0 trillion by 2030. The following table provides tourism revenue generated in Japan by country.

International Tourism Spend in Japan (In Yen Billions)							
	2010	2011	2012	2013	2014	2015	2016
China	¥249.8	¥196.4	¥268.8	¥275.9	¥558.3	¥1,417.4	¥1,475.4
Taiwan	¥131.8	¥105.9	¥164.8	¥247.5	¥354.4	¥520.7	¥524.5
South Korea	¥197.3	¥125.4	¥146.6	¥197.8	¥209.0	¥300.8	¥357.7
Hong Kong	¥59.3	¥43.0	¥65.5	¥105.4	¥137.0	¥262.7	¥294.7
United States	¥115.9	¥81.3	¥97.9	¥136.2	¥147.5	¥181.4	¥213.0
Thailand	¥30.3	¥20.9	¥33.2	¥57.6	¥96.0	¥120.1	¥115.0
Australia	¥38.3	¥32.3	¥40.7	¥52.1	¥69.0	¥87.0	¥109.9
Singapore	¥29.8	¥16.2	¥18.5	¥31.1	¥35.5	¥57.9	¥59.1
Maresia	¥15.0	¥12.1	¥17.0	¥25.6	¥36.3	¥45.9	¥52.2
Canada	¥19.1	¥14.2	¥21.6	¥28.8	¥31.2	¥39.5	¥43.2
Europe, UK, Russia	¥96.2	¥56.8	¥75.6	¥96.2	¥109.8	¥175.4	¥187.1
Other Asia	¥11.8	¥8.7	¥11.0	¥10.9	¥82.6	¥115.6	¥137.2
Other Unclassified	¥153.9	¥101.3	¥125.0	¥151.6	¥161.1	¥152.6	¥179.4
TOTAL	¥1,148.5	¥814.5	¥1,086.2	¥1,416.7	¥2,027.7	¥3,477.0	¥3,748.4
<i>Source: Japan Ministry of Land, Infrastructure, Transport and Tourism</i>							



The following table has been converted from JPY to USD based on average annual currency exchange rates.

International Tourism Spend in Japan (In USD Billions)							
	2010	2011	2012	2013	2014	2015	2016
China	\$2.9	\$2.5	\$3.4	\$2.8	\$5.3	\$11.7	\$13.6
Taiwan	\$1.5	\$1.3	\$2.1	\$2.5	\$3.4	\$4.3	\$4.8
South Korea	\$2.3	\$1.6	\$1.8	\$2.0	\$2.0	\$2.5	\$3.3
Hong Kong	\$0.7	\$0.5	\$0.8	\$1.1	\$1.3	\$2.2	\$2.7
United States	\$1.3	\$1.0	\$1.2	\$1.4	\$1.4	\$1.5	\$2.0
Thailand	\$0.3	\$0.3	\$0.4	\$0.6	\$0.9	\$1.0	\$1.1
Australia	\$0.4	\$0.4	\$0.5	\$0.5	\$0.7	\$0.7	\$1.0
Singapore	\$0.3	\$0.2	\$0.2	\$0.3	\$0.3	\$0.5	\$0.5
Maresia	\$0.2	\$0.2	\$0.2	\$0.3	\$0.3	\$0.4	\$0.5
Canada	\$0.2	\$0.2	\$0.3	\$0.3	\$0.3	\$0.3	\$0.4
Europe, UK, Russia	\$1.1	\$0.7	\$0.9	\$1.0	\$1.0	\$1.4	\$1.7
Other Asia	\$0.1	\$0.1	\$0.1	\$0.1	\$0.8	\$1.0	\$1.3
Other Unclassified	\$1.8	\$1.3	\$1.6	\$1.6	\$1.5	\$1.3	\$1.7
TOTAL	\$13.1	\$10.2	\$13.6	\$14.5	\$19.2	\$28.7	\$34.6

Source: Japan Ministry of Land, Infrastructure, Transport and Tourism

PURPOSE OF VISIT

The following table details by country of origin, where international tourists visit in terms of regions in Japan. The region of Kanto is visited the most followed by the Kinki region. In 2016, 36.0% of the Chinese tourists visited the Kanto region, which was slightly more than the 34.1% of Chinese visitors that went to the Kinki region in the same year. South Korean visitors frequent the Kinki and Kyushu regions the most at 28.4% and 27.0%, respectively. South Korea has the highest visitor rate to Kyushu than any other country at 27.0%. South Koreans also visit the Kanto region frequently at 22.0% and also have the highest rate among any single country visiting Okinawa at 7.7%. Thirty-percent of tourists from Taiwan and Hong Kong combined go to the Kanto region. Additionally, the Kinki region also receives tourists from Taiwan and Hong Kong, or 25.2% in 2016. Nearly one in two people from the remaining Asian countries (Thailand, Malaysia, Singapore, Philippines, Indonesia, Vietnam, and India) visit the Kanto region. Almost half of the visitors from the US and rest of world also visit the Kanto region. GMA notes that Chinese visitors are evenly spread among the Kanto and Kinki regions, while visitors from other countries visit Kanto and Kinki and a general ratio of two to one.



2016 Estimated Tourism Visitation by Region, Japan

	Hokkaido Region	Tohoku Region	Kanto Region	Hokuriku- Shinetsu Region	Chubu Region	Kinki Region	Chugoku Region	Shikoku Region	Kyushu Region	Okinawa Region
China	4.2%	0.7%	36.0%	1.7%	15.8%	34.1%	0.9%	0.6%	2.5%	3.6%
Korea	5.2%	0.6%	22.3%	1.1%	3.8%	28.4%	3.4%	0.6%	27.0%	7.7%
Taiwan/Hong Kong	9.4%	2.2%	30.0%	7.0%	7.7%	25.2%	2.7%	0.9%	6.8%	8.2%
Thailand	10.2%	1.5%	43.5%	3.2%	10.5%	22.3%	2.1%	0.6%	6.0%	0.3%
Malaysia	9.8%	1.1%	40.0%	3.3%	8.1%	33.1%	2.2%	0.6%	1.3%	0.3%
Singapore	5.2%	2.3%	50.0%	5.4%	8.6%	20.5%	2.6%	0.3%	4.9%	0.2%
Philippines	1.1%	1.7%	50.3%	2.3%	11.4%	27.5%	1.7%	0.5%	3.4%	0.1%
Indonesia	2.6%	0.7%	48.1%	4.7%	8.7%	28.8%	2.5%	0.8%	2.5%	0.5%
Vietnam	0.5%	2.2%	43.8%	3.3%	15.8%	26.9%	2.7%	0.3%	4.6%	0.0%
India	0.6%	1.2%	60.3%	1.7%	9.4%	20.2%	3.9%	0.8%	1.2%	0.7%
US & ROW	2.9%	1.3%	48.4%	4.6%	7.2%	23.4%	6.1%	0.9%	3.1%	2.1%
Europe	2.0%	1.3%	45.1%	5.3%	8.8%	24.7%	8.1%	1.1%	2.5%	1.2%

Source: Japan Tourism Agency - Ministry of Land, Infrastructure, Transport and Tourism, GMA

CHINESE IMPACT ON INTEGRATED RESORTS

Chinese visitors to Japan continue to play a critical role in the growth of overall tourism. In 2012, Chinese visitors accounted for only 1.4 million visitors. In 2016, the number of Chinese visitors jumped to 6.4 million. Japan continues to relax visa regulations in an effort to allow for multiple visits and repeat visitors from China. Many of the current rules were relaxed in 2016 when the Japanese government wanted to further advance personal travel and business activities. Because of the increased travel from Chinese visitors, Japan has seen growth in the retail and cosmetic sectors. These are two areas where Chinese like to shop and will drive additional dollars into the Japanese economy.

As one of Japan's closest neighbors, it seems logical that this relationship and exchange of visitors would increase over time. While there have been political conflicts between the two countries in the past, regional tourism between China and Japan will continue to develop as long as the visa relaxation policies continue to allow for the flow of visitors. This could be further enhanced once integrated resorts open because of the interest that Chinese visitors have in casino gaming.

Caution should be noted that once casino gaming opens up in Japan, China might regulate the flow of tourists as it does to Macau today. The Chinese government may want to restrict the locations where its citizens can participate in gaming in a manner no different than how they restrict their ability to visit Macau. China has over time regulated visas to Macau and



other places to control access to a particular destination. While this may inhibit the Japan market to some extent if this were to occur, Japan still has a dominant local market as well as other tourist populations that will help drive gaming revenue.



IV. THE JAPANESE GAMER

Economists, financial analysts, and industry operators have sought to estimate the gaming revenue potential for integrated resorts in Japan, relying on future forecasts of the adult population, and estimates of the probable propensity rates among Japanese adults to participate in casino gambling, their expected frequency of visitation, and theoretical loss per visit. However, scant research has been conducted to understand what kinds of games Japanese residents will find appealing once casinos come to fruition. The authors believe this is an important part of the forecasting equation, since the types of games that a casino offers will impact casino floor design, gaming revenue per square foot, labor costs and ultimately EBITDA margins.

To this end, the authors initiated exploratory research into the gaming behavior of Japanese nationals, both at home and abroad, and factored their findings into their predictive model. The authors believe this will provide a more accurate forecast of gaming revenues from the Japanese domestic gaming market.

GAMES CURRENTLY PLAYED IN JAPANESE SOCIETY

PACHINKO

Pachinko is the most popular form of gaming entertainment available in Japan today and is played in Pachinko parlors, essentially storefront amusement arcades. A Pachinko machine resembles a vertical pinball machine, but without flippers. A player purchases tokens which are exchanged for small steel balls. The player fires a number of steel balls into the machine, which then cascade down through a dense jungle of pins. If the balls bounce into certain locations, they may be captured and a sequence of events may be triggered that results in more balls being released.

The object of a Pachinko game is to capture as many balls as possible. Since gambling for cash is illegal in Japan, balls that are won cannot be exchanged directly for money in the Pachinko parlor. Rather, the balls are exchanged for tokens or prizes, which are then taken outside and exchanged for cash at a place nominally separate from the parlor. These redemption centers are often nothing more than a window off of a sidewalk near the Pachinko parlor.



Pachinko games began as purely mechanical devices, evolved into electro-mechanical units, and now offer highly digitized gaming experiences that are similar in appearance to video slot machines.

PACHISLOTS

Pachislots are a derivation of traditional Pachinko machines and are similar in appearance to modern slot machines. In fact, Japanese slot makers that export slot machines to other markets build Pachislots for the Japanese market. Pachislots display electronic reels, and allow players to enter bonus rounds should the player hit a certain reel combination. A key difference between a Pachislot machine and a more traditional slot machine is that the player has the ability to press a button and in a way influence where each individual reel stops. Given the speed with which the reels spin, the chance of stopping a reel at a precise point is remote, but it does give players the illusion that they can influence the outcomes of games.

Another key difference from a slot machine is that a Pachislot does not accept or dispense currency. Similar to Pachinko, a player purchases tokens. These tokens are inserted into the Pachislot, initiating game play. Upon conclusion of a gaming session, a player is issued tokens, which can then be redeemed for prizes. Those tokens and prizes are then taken outside and exchanged for cash at a nearby redemption center. Although Pachislots are available at most parlors, more traditional Pachinko machines remain the dominant choice among Japanese players.

PACHINKO AND PACHISLOT STATISTICS

The Japanese Pachinko industry represents a significant portion of the overall entertainment dollars spent by the Japanese consumer. Pachinko parlors are operated under Category 4 of the “Business Affecting Public Moral Regulations Act.” Parlors offer prizes to players based on the results of their individual play. Only prizes are offered, as it is illegal to offer cash or other forms of payment. However, the prizes are typically sold for cash at establishments near the Pachinko parlor. Each parlor under the regulations should be prepared to have a sufficient amount of daily supplies of ordinary prizes. Special prizes are awarded to a player in amounts corresponding to the number of balls that are won. These prizes can be sold for cash.

According to the Ministry of Economy, Trade, and Industry and the Nichiyukyo Association, the Pachinko industry was nearly a \$34 billion USD industry in 2016. If one looks at the



collective growth of Pachinko from 2008 to 2016, the market jumped from \$7.3 billion USD in 2008, growing to a peak of \$42.5 billion USD in 2013. It has since retreated over the last three years from the overall high. If one looks collectively over the eight-year period, the CAGR for the period is 21.2%.

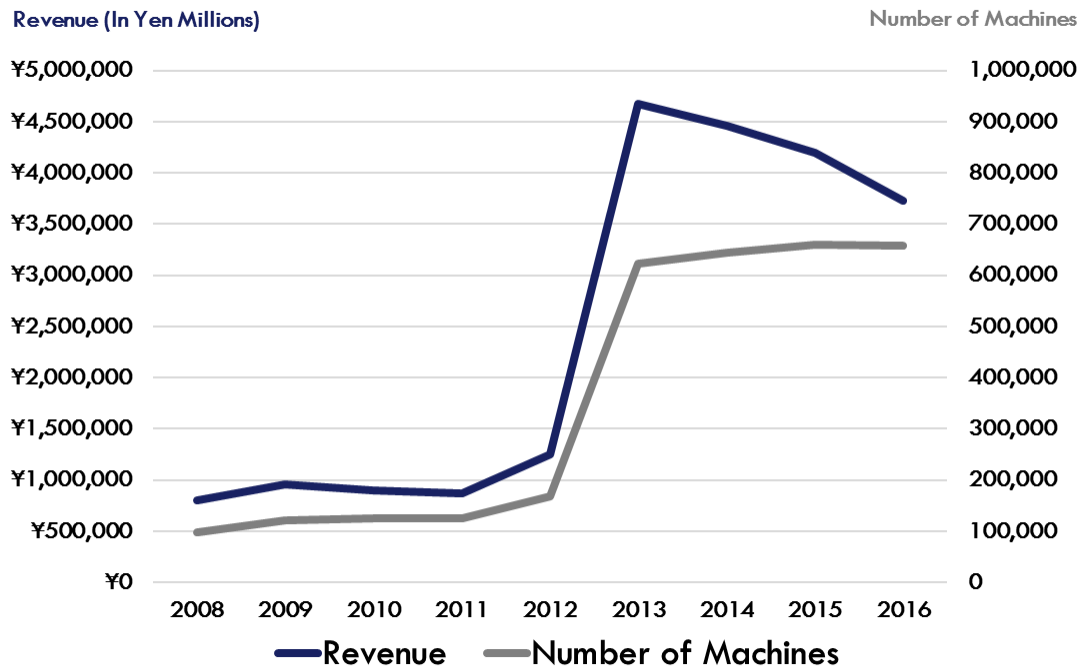
The number of Pachinko machines blossomed from 2008 to 2016, increasing over six times during that period. In 2008, there were over 98,000 Pachinko machines with a win per machine per day of \$203 USD. Looking at the last year, the number of Pachinko machines jumped up to over 658,000 machines, but the win per machine per day dropped to \$141 USD. As of 2015, there were a total of 10,011 Pachinko and Pachislot parlors in Japan.

Pachinko parlors are also significant employers. Current employment trends are similar to those of the revenue and machine growth trends. In 2016, the Pachinko industry employed a total of 33,466 individuals, with 14,723 full time employees and 18,743 part-time employees. This is up significantly from 2008 when there was a total of 7,371 employees with over 3,000 full time and 4,300 part-time employees. The employment level of Pachinko parlors has remained relatively consistent over the last four years.

Historical Performance of Pachinko Market						
Year	Revenue (Millions)		Number of Machines	Win Per Machine Per Day		
	Japanese Yen	USD		Japanese Yen	USD	
2008	¥ 800,173	\$ 7,282	98,390	¥22,281	\$203	
2009	¥ 960,922	\$ 8,744	121,956	¥21,587	\$196	
2010	¥ 900,889	\$ 8,198	124,845	¥19,770	\$180	
2011	¥ 870,573	\$ 7,922	124,741	¥19,121	\$174	
2012	¥ 1,251,001	\$ 11,384	167,438	¥20,470	\$186	
2013	¥ 4,669,393	\$ 42,491	622,968	¥20,535	\$187	
2014	¥ 4,456,080	\$ 40,550	644,109	¥18,954	\$172	
2015	¥ 4,195,768	\$ 38,181	659,556	¥17,429	\$159	
2016	¥ 3,726,948	\$ 33,915	658,610	¥15,504	\$141	
2008-2016 CAGR	21.2%	21.2%	26.8%	-4.4%	-4.4%	
Source: Nichiyukyo Association						



Historical Performance of Pachinko Market



Source: Nichiyukyo Association

Pachinko parlors are dominated by men. As stated above, the gender mix of Pachinko players is 80% male/20% female. Observationally, the ratio is 90% male/10% female. This is not to suggest that Japanese women would not enjoy various forms of electronic gambling if it were available in casinos. Rather, the male-dominated, noisy and smoky Pachinko parlors offer very limited appeal to Japanese women. Pachinko and Pachislots are wildly popular games, but their popularity does not truly reflect the kinds of games the Japanese may enjoy if other forms of gaming entertainment were available.

OICHO-KABU

Oicho-Kabu is a traditional Japanese card game that is somewhat similar to Baccarat. Oicho-Kabu means 8-9 and uses the Japanese kabufuda names for the numbers one to ten. As in Baccarat, this game has a dealer, whom players try to beat. The goal of the game is to reach 9; however, the similarity ends at that point since Oicho-Kabu is typically played with a different deck of cards called kabufuda cards. Kabufuda has four sets of ten cards. Three of the four sets are identical and the fourth set has a different number 1 and number 4.

The popularity of Oicho-Kabu and its similarities to Baccarat indicate that Baccarat might be embraced by mass market Japanese gamers if players accept traditional playing cards.



Alternatively, Japanese regulators may permit Oicho-Kabu, played with Kabufuda cards as a licensed table game. In that case, the game will achieve quick acceptance and will certainly occupy a prominent position on the table game floor.

OBSERVATIONS FROM OTHER MARKETS

MACAU

The authors of this white paper interviewed a number of casino executives with experience in Macau and posed the question, “What do Japanese gamers like to play?” It quickly became apparent, given the range of responses, that there was no one game that Japanese players were observed playing in Macau’s casinos. Baccarat was often mentioned as a popular game among Japanese playing in premium gaming areas but the preponderance of Baccarat in those high limit rooms may have skewed opinions.

Opinions from industry experts often contradicted one another. One gaming executive mentioned Blackjack as a popular game while another stated that Japanese were unfamiliar with the rules of Blackjack and did not play the game. These kinds of contradictions made it necessary for the authors to continue their research. What eventually became clear was that no one game has distinguished itself as a favorite among Japanese visitors in Macau.

Baccarat remains the most popular game in Macau casinos, owed in no small measure to the fact that this table game has long been the most popular game among Chinese players, Macau’s primary market. Slot machines have taken longer to grow in popularity. Electronic Table Games (“ETG’s”), which made their first appearance in Macau over the last decade, have grown rapidly in popularity. ETG stadiums, comprised of individual betting stations clustered in a rotunda configuration around a central wagering center, now occupy significant portions of casino gaming floors. They offer patrons the ability to play Baccarat and other games but with lower minimum bets. With the right mix of games, ETG’s could also grow to occupy significant areas of Japanese IR gaming floors.

SINGAPORE

Singapore attracts a far more diverse mix of tourists than Macau, particularly from Japan. In addition to sightseeing, shopping and dining, Japanese visitors visit the city’s integrated resorts. As in Macau, interviews were conducted among industry professionals familiar with the Singapore market. Again, no one table game or machine preference (slots or electronic table games) emerged as the game of choice preferred by Japanese players.



SAIPAN

Saipan offers additional clues as to which games will resonate well with Japanese gamers. Saipan is a South Pacific resort destination popular with tourists from Japan. Japanese visitors to the island range from 60,000 to 100,000 visitors a year and Japan ranks third behind China and Korea in annual visitation to the island.¹

Saipan introduced casino gaming in 2015 with the opening of Best Sunshine Live. The casino, housed in a portion of the T-Galleria DFS Shopping Mall in central Garapan was ostensibly built to train casino employees as a prelude to the opening of the parent company's Imperial Pacific Resort, which is scheduled to open in mid-2017. Best Sunshine Live offers gaming patrons:

- 116 slot machines
- 6 Black Jack tables
- 2 Roulette tables
- 4 Sic Bo tables
- 1 Pai Gow Poker table
- 2 Texas Hold'em Poker games
- 16 Baccarat tables - Premium mass with 6 Baccarat tables
- 5 VIP rooms with 10 Baccarat tables

While VIP Baccarat play dominates the news, and is often the subject of Imperial Pacific press releases, the casino conducts robust business in its main casino, primarily from tourists.

The main casino enjoys a substantial amount of foot traffic, since it is located between the mall's bus depot and shopping arcade. The mall is also located near a concentration of hotels and retail shops. As such, a large number of Japanese, Korean, and Chinese tourists transit through the casino on a daily basis.

Observationally, and in discussion with executives at Best Sunshine, Japanese tourists tend to favor Blackjack as their preferred table game along with slot machines. In fact, the casino's slot area often operates at 100% capacity, due both to the amount of foot traffic and limited number of gaming devices.

¹ Marinas Visitors Authority, Visitor Arrival Statistics, 2016.



CRUISE SHIPS

A number of cruise ships sail out of Japanese ports including Osaka, Tokyo, and Nagasaki. Cruise lines, including Princess, Holland America, Crystal and Celebrity, offer casino gaming as an amenity. These casinos provide a common mix of gaming including Blackjack, Craps, Roulette, Mini-Baccarat, and slot machines. Cruise lines have a great degree of discretion in determining what kinds of games they should offer to their patrons and alter their game mix to meet the needs of a particular market. Their game mix indicates that Japanese cruise customers enjoy the same diverse mix of games appreciated by western gamers.

SUMMARY OF FINDINGS

With an examination of Japanese gamers' behaviors both within Japan and in other markets complete, the authors reached the following conclusions.

JAPANESE GAMERS ARE NOT LIKE MACAU GAMERS

The single greatest misconception a casino operator can make is to assume that Japanese gamers will play the same games as those players that frequent Macau. The Chinese have a table game centric gaming culture and have long embraced Baccarat and Sic Bo. While the Japanese enjoy Oicho-Kabu, they have a long-established history as a machine-centric gaming culture, as they are enthusiastic Pachinko players. Pachinko in turn spawned Pachislots, a hybrid product that combines the convoluted wagering/redemption system of Pachinko with the entertainment value of modern slot machines.

SLOT MACHINES WILL HAVE A FAR MORE PROMINENT POSITION ON THE GAMING FLOOR

Macau, Singapore, Korea, and Saipan allocate a greater percentage of their gaming floors to table games than North American casinos. This is because of the cultural appeal of table games among Chinese gamers. While table games are expected to be popular, the authors believe that slot machines will have a far more prominent place in Japanese integrated resorts than other Asian markets. The Japanese enjoy electronic gaming and Japanese slot machine manufacturers already understand the kinds of themes, symbols, music and game math that are appealing to Japanese players. One can expect that slot manufacturers including Aruze, Konami, and Sega Sammy will research and develop slot machines that will appeal to the adult population.

Modern slot machines offer a far more convenient method of wagering than Pachinko or Pachislots. These modern slot machines accept paper currency and dispense tickets, which



can be redeemed at kiosks on the casino floor in a safe and secure environment. Pachinko parlors require a convoluted redemption process where patrons redeem balls for tokens, often exchange those tokens for merchandise, and then redeem them outside of the parlor at a storefront window.

As has been demonstrated in the United States over the past twenty years, when a casino operator provides more convenient methods of wagering, participation in slot machine gaming grows as does slot machine revenue. The introduction of bill validators over two decades ago, the evolution of Class II bingo machines to games that are now nearly identical to slot machines, and ticket-in/ticket out currency wagering/redemption systems each serve as examples of this phenomena.

The authors of this white paper believe that casino operators will initially allocate 45% of their gaming floor to slot machine gaming, 5% to electronic table games and 50% to table games. It is also expected that those ratios will change with slot machines gaining an increasing share of the casinos' square footage, at the expense of table games.

It is also advised that gaming operators design casino floors that are flexible and can be quickly altered to meet the evolving needs of the market. Blackjack is expected to be a popular table game. Baccarat tables, with their large footprint, are not expected to dominate the gaming floor as they do in Macau. Rather, games such as Mini-Baccarat, whose table footprint matches Blackjack, will allow operators to quickly adjust their game mix to match the needs of the market.

GAMING PARTICIPATION RATES AMONG WOMEN WILL CLOSELY MATCH THOSE OF MEN

The low participation rate of Japanese women in gaming activities today is directly correlated to the environments where gaming is currently available. Pachinko parlors are simply unappealing environments for women. They are noisy, crowded, smoky and dominated by men. They do not offer the comfort, sense of safety and security, and overall appeal that one would find in a modern casino resort. In addition, they require that token redemptions take place outside of the Pachinko parlor in essentially a street environment. The unappealing interior environments coupled with the shady methods of token redemption have in fact shaped negative opinions of casino gambling among Japanese women.



The authors believe that if an appropriate gaming environment were provided for women, one that is safe, comfortable, and free of high concentrations of noise and smoke, that Japanese female gaming participation will quickly rise to match that of Japanese male gamblers and may ultimately match rates seen in western casinos, where females often make up to 58% of the gaming population.



V. POLITICAL CLIMATE

LEGISLATIVE PROCESS FOR LEGALIZATION OF GAMING

Since the early 2000's, leadership in Japan has in some form, proposed and debated the legalization of casino gaming. As noted in other chapters of this white paper, Japan has a history of providing other forms of gaming to its citizens including Pachinko, Pachislots, horse racing and a lottery. Prime Ministers over this same time period have shared various levels of support for casinos and integrated resorts. In December of 2016, Prime Minister Shinzo Abe was able to pass the first integrated resorts bill before the National Diet.

As reference, the National Diet serves as the legislative body of Japan's government. This bicameral system has the House of Representatives as the lower house and the House of Councilors in the upper house. Members of both houses are directly elected and are responsible for passing laws as well as the selection of the Prime Minister.

The House of Representatives is comprised of 475 members with 295 of those members elected in single seat constituencies. The remaining 180 are elected through a party system of proportion representation through separate electoral block. The current composition of the House of Representatives is comprised of 294 members from the Liberal Democratic Party (LDP), 35 members of the Komeito, and the opposition comprised of 96 members of the Democratic Party (DP), 21 members of the Japanese Communist Party (JCP), 15 members of the Nippon Ishin No Kai, and the remaining 14 in smaller and independent parties.

The House of Councilors is comprised of 242 members with 146 elected from the 47 prefectures. The remaining 96 are elected by from a single national list based on proportional representation. The current composition of the House of Councilors is 121 members from the LDP, 25 members of the Komeito, and the opposition comprised of the 49 members of the DP, 14 members of the JCP, 12 members of the Nippon Ishin No Kai, and the remaining 21 in smaller and independent parties.

The latest legislative debate was intensive and saw the ultimate passage of the integrated resort legislation in December 2016. The initial vote passed in the middle of December and was then finalized and became legal on December 26, 2016. The speed at which the vote went through surprised even some of the integrated resort bill's staunchest supporters; however, the tougher work is still ahead and will require some due diligence by the National



Diet as it puts together the framework for the second IR bill that will ultimately define the shape and scope of casino gaming in Japan.

While the National Diet will formally debate and hopefully approve the final version of the second bill later this year, the work of what will be included in that bill began in April 2017 when Prime Minister Abe formed the government's task force for licensing and operating integrated resorts. The Prime Minister along with Chief Cabinet Secretary Yoshihide Suga will chair the panel that will bring together experts to discuss additional topics of financial and tax issues, advertising regulations, money laundering, and keeping criminal activity out of casinos as well as how to handle the issue of responsible gaming. The task force will bring together experts including lawyers, accountants, economists, and other professionals over the next few months to develop a set of recommendations. The task force is scheduled to have these recommendations completed by the end of the summer, 2017.

The Osaka Prefecture also established in April of 2017 a specific bureau to work on the integrated resort issue. Tasked with attracting prospective IR developers, the group will also look into concerns of problem gambling as well as public safety. Osaka is also looking at how to address transportation and infrastructure on the island that has already been deemed as the preferred site should the city be chosen to host an integrated resort.

PUBLIC PERCEPTION OF GAMING BILL

Public perception of gaming in Japan as well as support for the initial integrated resorts bill has struggled and is neither above nor near 50%. Recent polls have shown more than half of the Japanese public are against the bill. Some polls have even shown favorability toward casino gaming to be as low as 12%. Japan's biggest daily newspaper, *Yomiuri Shimbun*, recently published a poll that showed two-thirds of respondents opposed the legislation. The same poll showed just one in four in support of the legislation. The one thing that is consistent amongst all of the polls is that casinos remain deeply unpopular with the public. One thing that has been clear from the polling is that there needs to be further debate on the topic along with education.

GMA, through its discussions with stakeholders, asked why gaming had such a negative perception among the public when there were already other forms of gambling in Japan, including Pachinko and Pachislots. While Pachinko may be an accepted form for gaming, individual perceptions of casino gaming are much different and an understanding of integrated resorts are an almost foreign concept. Problem gambling and organized crime



were other issues that have fueled negative perceptions of integrated resorts. Women also tend to have a more negative view of casino gaming than men do.

This data should serve as a baseline for the government and operators to begin educating the public on the positive aspects of integrated resorts. As one of the sections of this paper outlines, individuals need some education on integrated resorts. GMA assembled a sample of integrated resorts from potential operators with developments in Las Vegas, Macau, and Singapore to highlight that, while a casino is centric to the IR model, it is a small portion of the overall facility.

The one positive of current polling is the perception of Prime Minister Shinzo Abe and his cabinet. While his poll numbers are down slightly, they continue to remain above 50%. In an April 2017 poll, conducted by NHK, the opinion poll found a 53% approve rating, which was up two points from March. However, it was down from a February poll that had the cabinet at 58%. A similar poll conducted by Kyodo News indicated support at 52.4% as of late March. This was down from a poll two weeks earlier by Kyodo News that had the number at 55.7%. The slight slip in numbers has more to do with other political issues than with gaming, specifically.

Public perception of gaming is important to the overall market success of integrated casino resort development. The good news is that time is still on the side of Japanese stakeholders and potential operators to sway the public in favor of integrated resorts. As the second IR bill takes shape, this will help determine the full opportunity that exists for integrated resorts. Since details are vague, this lack of information has also contributed to the uneasiness of the public and their perception of casino gaming.

The next bill must include measures to address problem gambling and creating an environment for responsible gaming. This will be part of the partnership that will occur between the government and its chosen operators. Operators would be best served by highlighting all the amenities that are included in an IR and how they will be strong operators by offering that same environment of responsible gaming. The government must use evidence-based solutions in creating their responsible gaming structure and not put in arbitrary measures to pacify public opinion. More than any other, responsible gaming is one of the key issues that can help sway public opinion.



IMPORTANT BILL CONSIDERATIONS

While nothing is certain when it comes to the second integrated resort bill, there are certain things that Japan must consider as part of developing the regulatory structure to support casino gaming. The issues and topics that must be considered include, but are not limited to the establishment of an entire regulatory structure for casino gaming, establishment of responsible gaming programs, anti-money laundering programs, tax rates, licensing and renewal process, and the initial selection process. Singapore continues to be discussed as a model to follow and one that should be considered but other jurisdictions where international operators must meet suitability standards should also be used as reference points. Japan has made it clear that it wants the “highest standards of casino regulations” that will create “clean” integrated resorts.

One of the biggest discussion points will be the number of locations. While there is no definitive number that has been determined, most discussions have the initial round of integrated resorts between one to three locations. If there were to be a second round, with the first “pilot” round serving as a true test, one may see an expansion between that to maybe six locations. However, it is viewed that if this were to happen, the second round would not occur until a few years after the first round of integrated resorts had been operational. It is largely viewed that the large cities have an advantage over some of the more regional sites in the first round. However, all things should be considered in looking at the first round of integrated resorts. As it is discussed later in this paper, there are some scenarios that would prove that larger IRs and regional IRs should be considered in the first round to boost tourism and the economic impact for the entire country and not just a specific prefecture or region.

A second major discussion point will be tax rates. While jurisdictions around the world have various tax rates, Japan must consider how to best partner with potential operators in what is almost a revenue sharing exercise. One cannot set a rate that is too high or Japan will not attract the best operators to deliver iconic integrated resorts through significant investment. The lower the tax rate, the larger the investment and the better the return in the long term for Japan and its citizens. Singapore’s tax rate will most likely be used as a benchmark for this initial rate with different rates for mass market and VIP play. Nevertheless, Japan must offer a rationale tax rate to get the largest investment and best operators to compete in a limited market of integrated resorts.



Responsible gaming will be the most significant piece in any discussion of integrated resorts. As this paper examines in a later chapter, Japan should rely on evidence-based research to address the responsible gaming issue, both for integrated resorts as well as non-integrated resort gaming facilities. There are several models in use in other markets around the world that offer players responsible environments in which to participate. As Japan relies on experts to craft the second IR bill, GMA would strongly encourage stakeholders to rely on academics, associations, experienced operators, and other governments that have established or built responsible gaming programs from scratch for their expertise.

POTENTIAL INTEGRATED RESORTS SITES

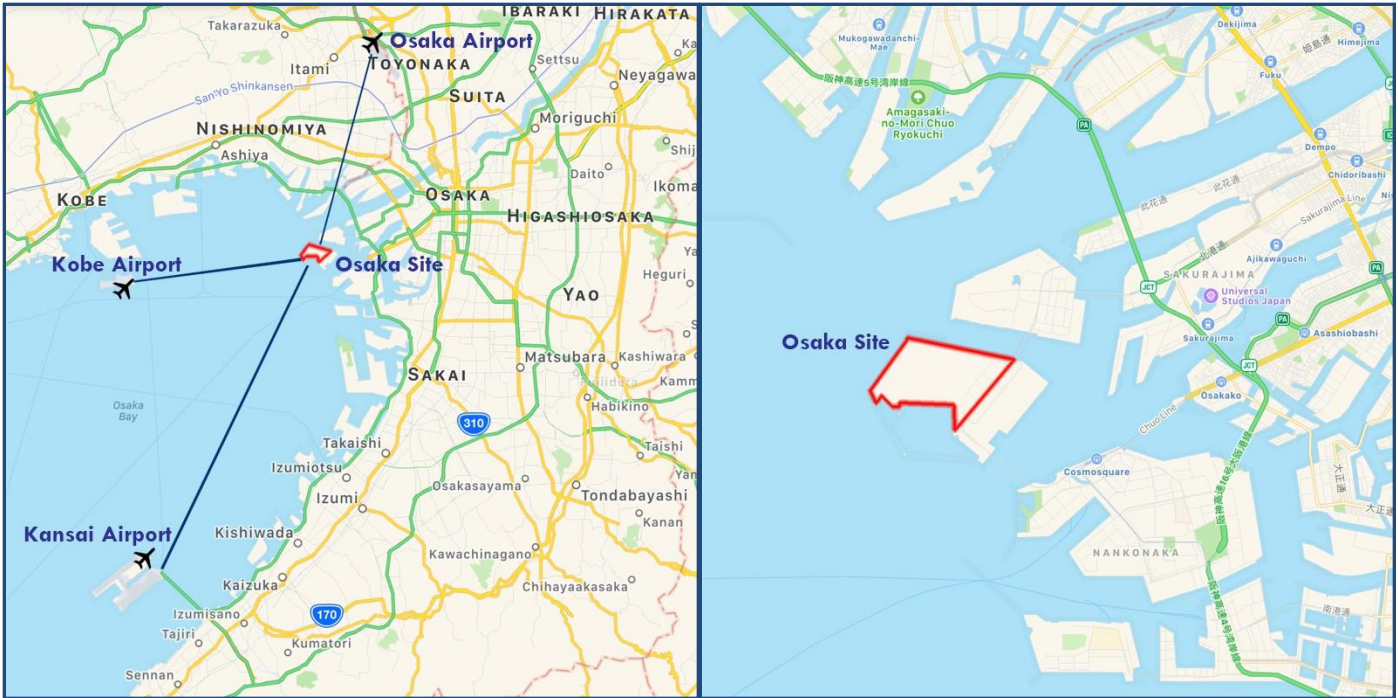
Throughout the process, stakeholders have identified various sites for integrated resort developments. Some of these will be for large-scale integrated resort developments while others have the potential for regional integrated resorts. Below is a list of some of the sites that are currently under consideration for large-scale and regional integrated resorts. The sites are listed in alphabetical order by large and regional site. They are not listed in order of preference; those will be discussed specifically in the modeling projections, found later in this paper.

LARGE INTEGRATED RESORT SITES

Osaka

As Japan's third largest city, Osaka is located in the Kansai region of Japan with a direct population approaching 2.7 million people in a metropolitan area of 19.3 million people. Osaka has a well-defined area for an integrated resort. It has an extensive network of highways and rail for accessing the site, including a main line of the Shinkansen. High speed ferry service could be provided from two of the regions airports directly to the site. Three different airports serve Osaka: Kobe, located on the north side of the bay; Kansai, located on the south side of the bay, and Osaka International, located inland and to the north of the central business district. Located on the Osaka Bay, the potential integrated resort site sits on a man-made island, Yumeshima, and is on an active dock that is accessible currently by car with rail nearby. Should an integrated resort be developed, rail access would need to be extended to the site. Universal Studios Japan is also located near the site.



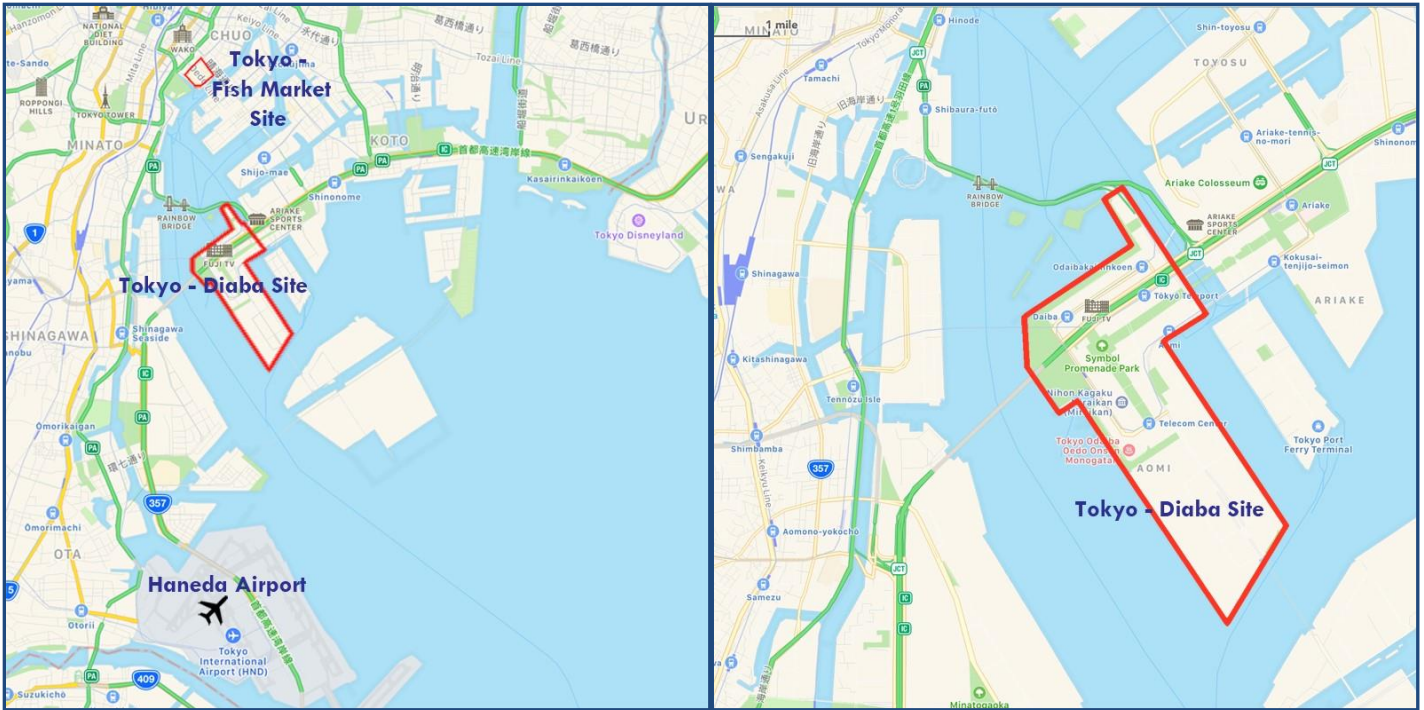


Tokyo – Diaba and Fish Market

The capital of Japan, Tokyo is the country's largest city with a direct population exceeding 13 million people and a metro area approaching 38 million; it is located in the central area of Japan. Tokyo is served by two major airports. Haneda is located to the south of the central business district and Narita is located on the outskirts of the city, to the east. While there may be other sites under discussion, most of the commentary surrounds two main sites within Tokyo.

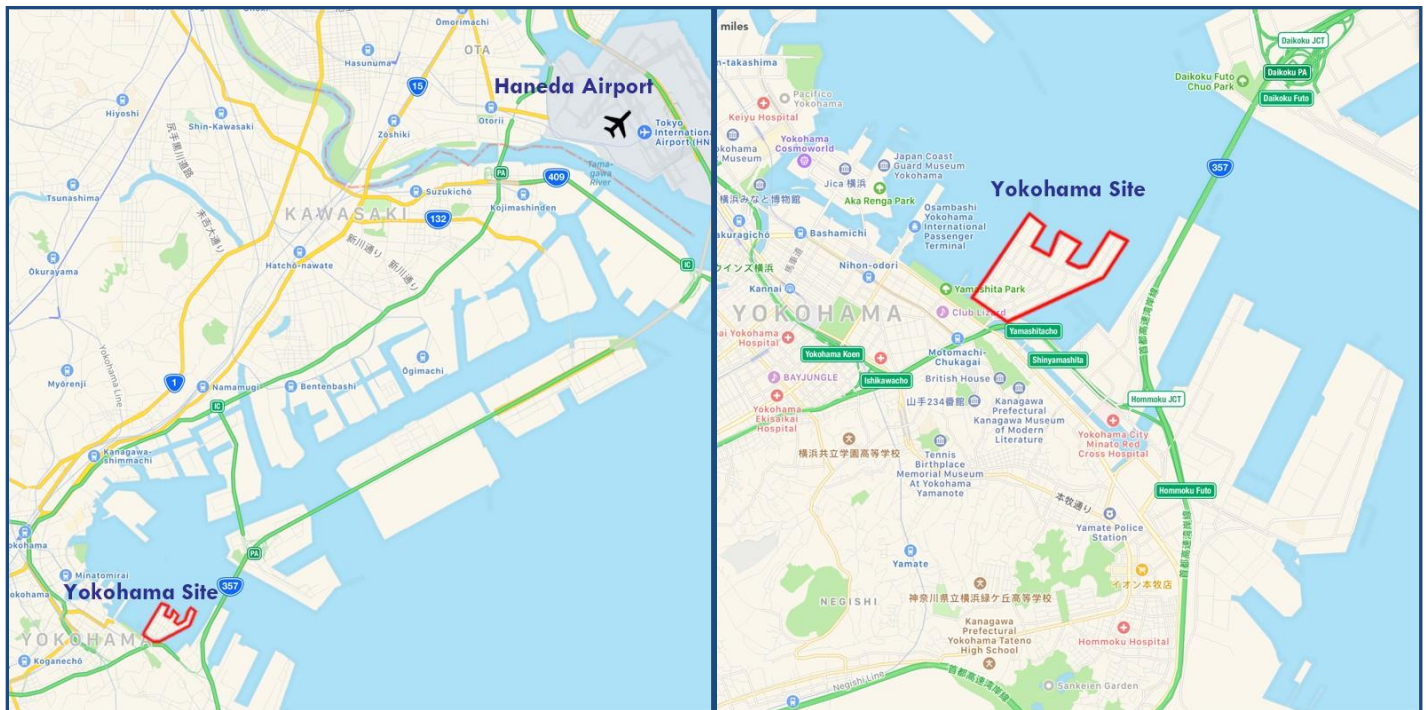
One of two proposed sites in is the Diaba region, located on a land area in the Tokyo Bay area. Diaba has good access from the monorail and connections to other rail lines. The area already has several hotels and some entertainment amenities. The other major site in discussion is where the Fish Market currently sits near Hamarikyu Onshi Garden and the Shiodome. The site will require the relocation of the current market but has solid access to several train stations and is in the heart of the central business district.





Yokohama

Japan's second largest city by direct population, Yokohama is within the metropolitan area of Tokyo and sits just to the south of Tokyo proper. Located on Tokyo Bay, Yokohama has good access by both regular and high-speed rail as well as being accessible to Haneda Airport. The site itself is located on an existing dock site that has been determined to be used for other sources in the future, including entertainment functions like an integrated resort. The site is located just off a major highway with the closest train station at Motomachi-Chukagai.



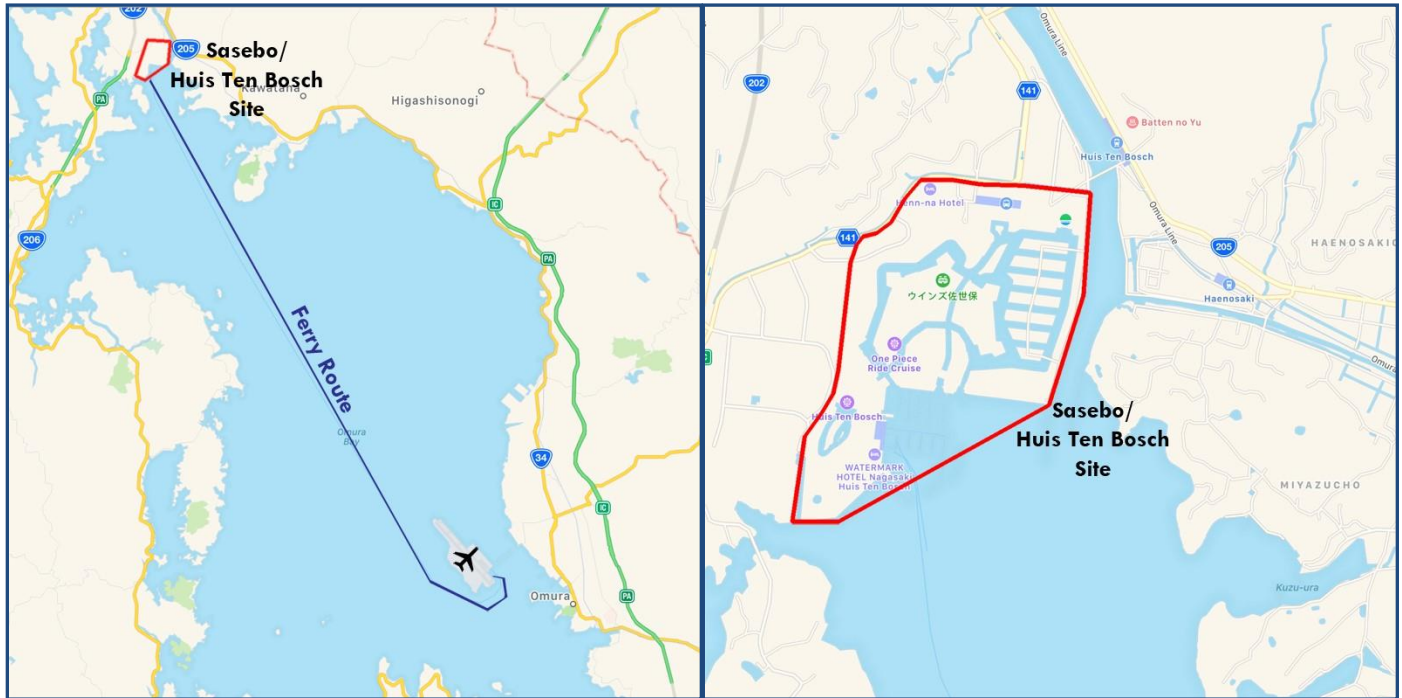
REGIONAL INTEGRATED RESORT SITES

Sasebo

Located in the Southern part of Japan, Sasebo is located to the north-northwest of Nagasaki, which offers the closest international airport. As one of two sites close to South Korea, it has a strong tourist reach. The best access to the region is by highway or rail. Access to the airport can also be achieved through a ferry that docks directly at Nagasaki International Airport. The proposed IR site would be near Huis Ten Bosch. Huis Ten Bosch is a theme park that replicates a Dutch village from the 1600's; it has shops, museums, restaurants, hotels, and entertainment attractions interspersed between canals, and is located on the Omura Bay. There are two rail stations that are close to the site in Huis Ten Bosch and Haenoski,



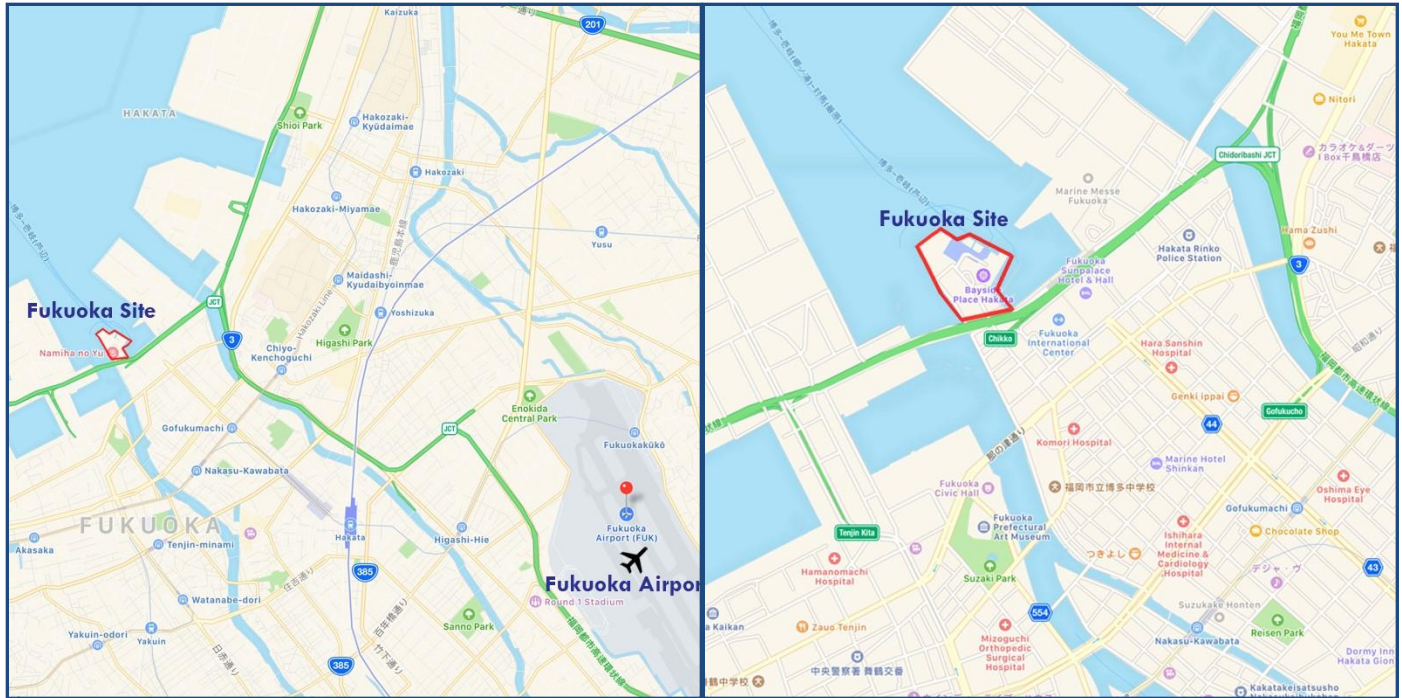
located on the Omura line. It does sit outside of the town of Sasebo itself and can be also reached by highway.



Fukuoka

Located on the western coast of Japan, Fukuoka sits close to South Korea on the island of Kyushu. It is the fifth largest city in Japan and the largest in the region. Fukuoka has a good airport that is located close to the city center and is in close proximity to the Shinkansen (high speed rail line). The proposed integrated resort site has good highway access. It is near the Fukuoka International Congress Center and the Marine Messe Fukuoka. Located on the water, it also has good access to the cruise ship port.

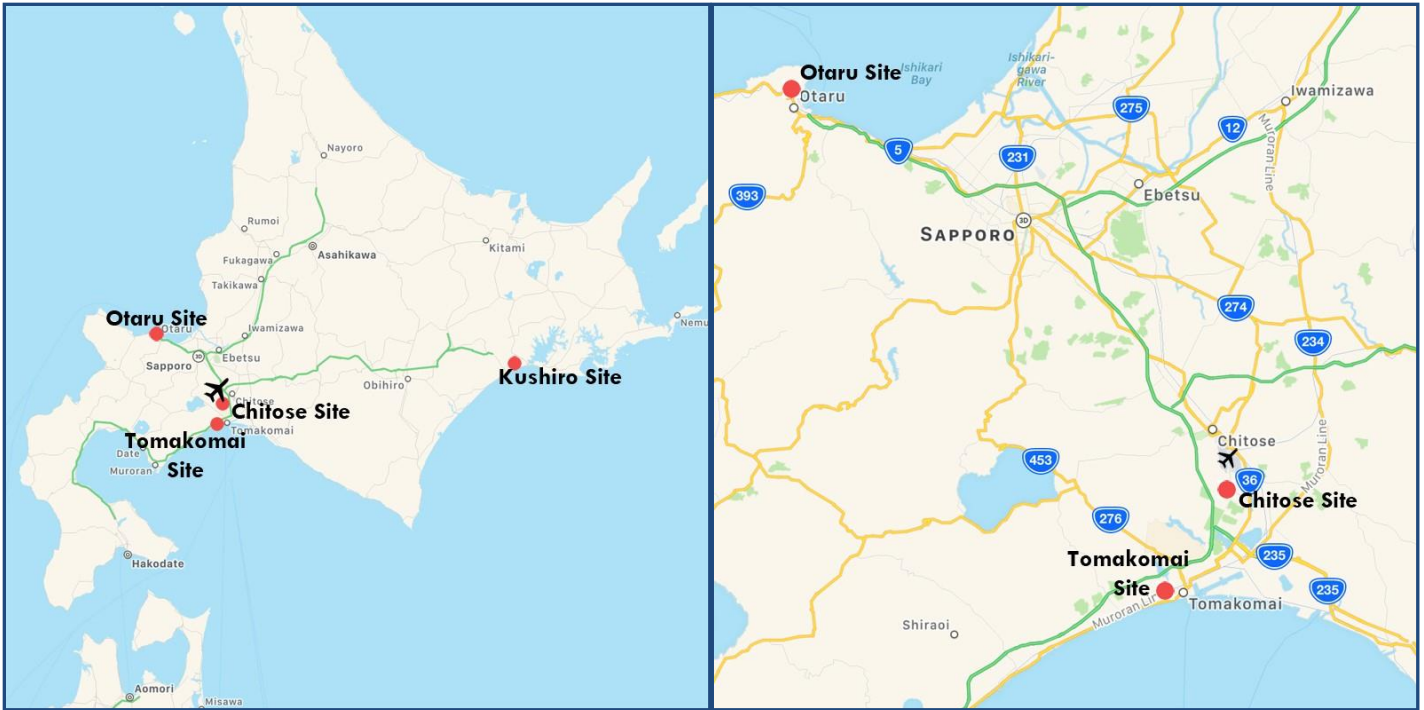




Hokkaido

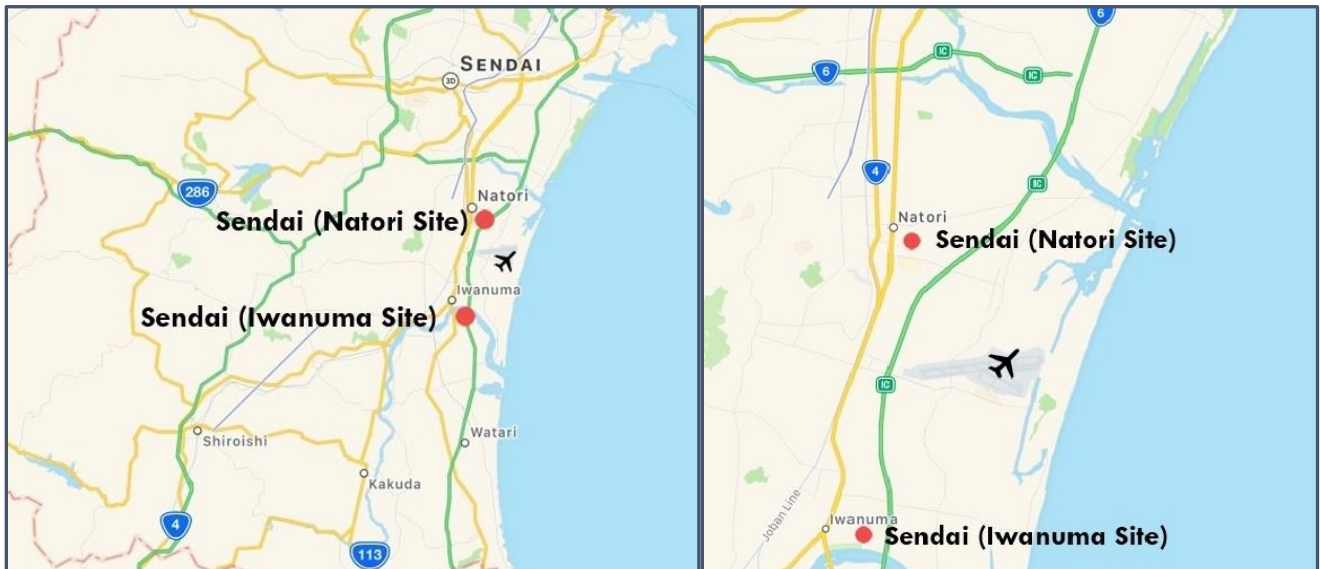
On the northern most island of Japan, Hokkaido has several sites in discussion. The main airport in Chitose serves the island, which is located outside of the capital city of Sapporo. Within the last year, the Shinkansen bullet train now services the island. The island has a population of over four million people. There are several sites that have been mentioned as prospects for a regional casino. These include Otaru, located on the west; Kushiro, located on the northeast part of the island; a site between Chitose and Tomakomai; and a site in Tomakomai. Almost every site has good access to rail as there is a direct line between Tomakomai to the south through Chitose, Sapporo, and over to Otaru. Kushiro is a good distance from the airport and is only accessible via highway.





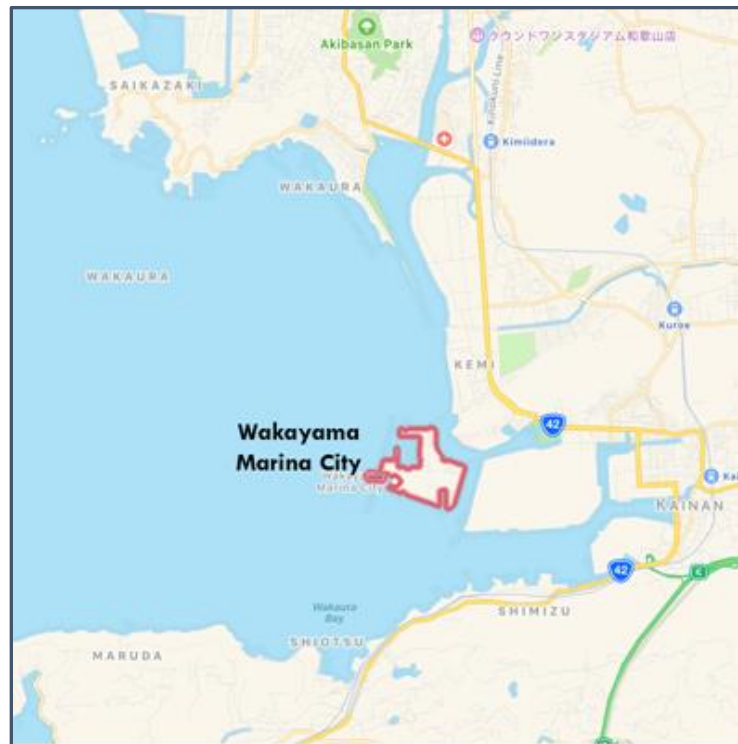
Sendai

With a population of roughly one million people, Sendai is located on the Pacific Ocean and is the capital of the Miyagi Prefecture. There are two sites in current discussion, near the airport in Natori and Iwanuma. Some may view these sites as less than ideal because of their proximity to Fukushima.



Wakayama

Wakayama City is the capital of the Wakayama Prefecture that is located to the south of the Osaka Prefecture. While the prefecture itself is mostly rural, Wakayama sits on Wakaura Bay. The city has a population of approximately 370,000 with the prefecture's total population at nearly one million people. The specific location is Wakayama Marina City which is an island located in the heart of Wakaura Bay. The site's closest train station is Kainan located on the Kinokuni Line; the site is also close to a major highway. The two closest airports are Kansai International Airport and Nanki-Shirahama Airport.



NEXT STEPS: EXPECTED RFP PROCESS

There will be several key discussion points that will occur over the remainder of 2017. In an April 1, 2017 article in the Japan Times, Prime Minister Shinzo Abe stated, “The world’s highest standards of casino regulations will be introduced, and policies to deal with issues like gambling addiction will be addressed. This will create clean, Japanese-style integrated resorts.” This statement was given at the establishment of the task force, designed to evaluate future development and regulations for integrated resorts. The task force, made up of lawyers, accountants, economists, and political analysts, will help formulate the second casino bill that will pass before the end of 2017. The bill will include the components outlined earlier in this document. Prime Minister Abe’s desire is to have the bill submitted



sometime this autumn for consideration by the Diet. This would set the stage for a debate at the end of 2017. Assuming that the second IR bill passes out of the Diet by the end of this year, GMA believes that a prospective timeline, although potentially aggressive, would allow the first IR to open in 2023.

Beginning in 2018, the Japanese Government will issue its own “RFP” process for governments that have an interest in hosting a proposed integrated resort development. This process may take anywhere from six to nine months. Larger cities will have one step ahead of any regional sites that have an interest because some of these sites are already working through a process to attract an IR developer. The leading case for this is Osaka, followed by Yokohama and Tokyo, although there are some regional sites that have had some discussions on IR placement. As cities and prefectures reveal their desire to host an IR, the government will then determine which cities would be allowed to run an RFP process. This process could take from six to nine months, taking the process into the end of Quarter 2/Quarter 3, 2018. The determination on numbers will most likely be determined in the second IR bill but current discussions call for one to three locations, with a potential second round after the first IR(s) are selected.

Once the cities have been chosen, a full RFP process within the prefectures will move forward for each large-scale and regional site. This selection process is expected to take anywhere from six months to a year, depending on how far along the site is through its due diligence process.

GMA believes that this selection process will end by Q3, 2019. This will then start the development process for each selected operator that has been selected for an IR. Using previous IR developments as a baseline, it will take roughly three and a half to four years to complete planning and construction of a large-scale development. This would put the opening of an IR sometime in the second half of 2023. This may change if smaller/regional IRs are allowed in the first round, which will allow for earlier openings. Development may also be delayed because of potential zoning challenges in larger cities like Tokyo, which would push openings back to 2024. GMA believes that the first stable year of revenue will occur in 2025. This will serve as a baseline for future projections that are outlined later in this document, based on the timeline described above.



Proposed Timeline for Integrated Resorts in Japan

2016	1st Integrated Resorts Bill passes in December
2017	
Q1	Begin discussions on next steps for IR's in Japan
Q2	IR Office Opens
Q2-Q3	Submission of 2nd Integrated Resorts Bill to Diet
Q3-Q4	Passage of 2nd Integrated Resorts Bill
2018	
Q1-Q2	Interested Prefectures reply to Government for selection
Q3	Prefectures begin RFP Process
2019	
Q1-Q3	Selection of operator for selected Prefecture sites
Q2-Q4	Developer process begins
2020	
Q2-Q4	IR Construction Begins
2023	
Q2-Q4	IR open

Source: GMA

While 2023 may seem like a significant time off from the current debate today, GMA believes that this timeline allows for a continued thoughtful debate for the creation of “clean, Japanese-style integrated resorts.” Japan, throughout its debate on gaming, has made it clear that it will want a highly-regulated environment that encourages large investment and sets a new benchmark in the evolution of integrated resorts. Using the next six years as a baseline, this system can be put into place through the development of a regulatory process, using other strict regulatory environments as models. This timeline also allows developers the next opportunity to create iconic venues that match or exceed those in Las Vegas, Macau, and Singapore.



VI. RESPONSIBLE GAMING INITIATIVES

Responsible gaming may be one of the most important issues that the Japanese government must address as it continues to explore and draft regulations to govern the future Integrated Resorts market. One of the chief reasons for this is partially because of the existing Pachinko market that is permeated throughout the country. Pachinko is a socially accepted form of entertainment but there are currently no true measures to address those that may have a problem with the game itself. However, Japan is not the first to tackle the expansion of Integrated Resorts in a market that already has other forms for gaming. The continued reference to Singapore as a model can also apply to how Japan may look into crafting regulations to address responsible gaming throughout all forms of gaming with the inclusion of this expansion into full casino gaming. Using science as well as initiatives and programs in other jurisdictions and with operators that have experience in working on responsible gaming matters will be key into developing a structure to support responsible gaming.

The propensity and treatment for problem gambling continues to grow through evidence-based research. As an average, the severe problem gambling rate around the world is under two percent of the population. In one of the most recent studies out of Asia, Hong Kong Polytechnic University looked into the gambling participation rates by Hong Kong residents and found that between 2012 and 2016 that the rate of problem gambling ranged from 1.4% to 2.0%. The study noted that number eventually levels off and begins to decline as the population grows more accustomed to gambling availability. Similar effects can be found in the United States where approximately one percent of the adult population has a severe gambling problem. It is important to have evidence-based research as a foundation for the treatment of gambling disorders as well as setting up a regulatory structure that supports an environment of responsible gambling.

RESPONSIBLE GAMING INITIATIVES IN UNITED STATES

The American Gaming Association (AGA) has a rich history of ensuring that responsible gaming is an integral part of the daily operation of operators like Caesars Entertainment, Hard Rock International, Las Vegas Sands, MGM Resorts International, and Wynn Resorts. This is central to their code of conduct, which pledges to their patrons to promote responsible gaming, to prevent underage gambling and unattended minors, serving alcohol responsibly, and advertising responsibly.

While each state jurisdiction may have slightly different regulatory structures, each operator takes responsible gaming seriously and they have implemented programs to assist patrons



as well as educate employees about this important issue. While each state differs on their regulatory structure, there is a national 800 number as well as ten states that have direct numbers to a help line. There are other safeguards that are put into place including advertising restrictions, limiting alcohol service, credit restrictions, loss limits, direct mail limitations, signage, self-exclusion programs, and treatment funding. Self-exclusion programs are either run through the operator or by the local governing regulatory body, depending on the jurisdiction. Emphasis continues to be placed on training employees as well as problem gambling prevention with employees.

Operators with casinos in multiple jurisdictions (e.g. Hard Rock International, Wynn Resorts, Las Vegas Sands) ensure that they are complying with each jurisdiction's requirements and tend to develop more universal programs to handle some of the more consistent components including exclusion programs, employee training, and awareness programs for patrons. Caesars Entertainment pioneered the first responsible gaming efforts when a group of employees formed a task force to study the issue of problem gambling. Those efforts translated into an initiative to educate employees, guests, and the public to understand the importance of responsible gaming and the prevention of underage gambling.

Most recently, MGM Resorts International announced a new partnership with the British Columbia Lottery Corporation (BCLC) to license its responsible gaming program, GameSense (a player focused responsible gaming program that encourages players to adopt behaviors and attitudes that can reduce the risk of developing gambling disorders) and establish it throughout all of its North American properties. MGM Resorts additionally committed to a research partnership between BCLC, MGM, and the University of Nevada Las Vegas (UNLV) International Gaming Institute (IGI).

The National Council of Responsible Gaming (NCRG) serves as the research center in the United States for understanding the science of problem gambling. The American Gaming Association has chosen the National Council on Responsible Gaming as its charity of choice to explore and understand pathological and youth gambling as well as finding effective methods of treatment for the disorder. Individual operators also contribute to the NCRG as well as sponsor their own individual research, not only in the United States but also in jurisdictions around the globe. NCRG also has embraced EMERGE (Executive, Management & Employee Responsible Gaming Education), a science-based training program, which was developed by scientists at Harvard Medical School. EMERGE was initially adopted in 2005 by Las Vegas Sands Corp. EMERGE content has been approved by an international third-



party credentialing agency and exceeds the requirements of current gaming regulations regarding training of employees.

MACAU'S ADOPTION OF RESPONSIBLE GAMING INITIATIVES

Macau, driven by its expansion of gambling, has embraced various responsible gaming measures. Many of these have been operator-driven to address exclusion, underage and unattended children, employee education, and general awareness and promotion of a responsible gaming environment. The Gaming Inspection & Coordination Bureau and other government agencies have developed processes with operators as well as other local organizations to assist with problem gaming. This also includes working with the University of Macau and the Macau Polytechnic Institute to form a Responsible Gaming Work Preparation Unit to develop policies and measures for the market.

There are several prevention and treatment centers that provide preventative and treatment services to those individuals, family or friends that need assistance with problem gambling. Macau has also held a responsible gaming week since 2009. The event has continued to grow over the last seven years as a way to promote an environment where responsible gambling occurs.

One of the more recent additions has been the installation of responsible gaming kiosks. The kiosks were launched by the government in 2012 and developed by the Social Welfare Bureau, Gaming Inspection and Coordination Bureau, and the University of Macau's Institute for the Study of Commercial Gaming. There are 27 kiosks in Macao with some located on the casino floor. As of earlier this year, some 9,000 residents and tourists have used the kiosks with 81 of those patrons using telephones to seek help. In 2016, 42 individuals registered for self-exclusion through the kiosks. Some kiosks also have staff or Ambassadors of Responsible Gaming that provide information and assist with the kiosks as well as participate in promotional events.

THE SINGAPORE MODEL

When Singapore opened its integrated resorts in 2010, it developed a framework under the auspices of the National Council on Problem Gaming (NCPG). Initially established in August 2005, NCPG was designed to be an independent council, comprised of members with expertise in communication, psychiatry, psychology, social work, counseling, and rehabilitative services. They were tasked with providing advice to the Ministry of Community Development, Youth, and Sports (MCYS) on how to educate and bring



awareness to the public on responsible gaming. They were also there to establish assistance programs, evaluate their effectiveness, and decide on the exclusionary process. They were also charged with working with the existing operators on their responsible gaming programs as well as sponsoring research on the topic.

SOCIAL SAFEGUARDS

The National Council on Problem Gambling works in tandem with the Casino Regulatory Authority (CRA) to minimize any effects of problem gambling at casinos. These social safeguards include the following:

- Casino entry levies
- Entry ban for those under the age of 21
- Credit restrictions for local casino patrons
- Casino exclusion and visit limits including:
 - Self-exclusion and voluntary visit limits
 - Family exclusion and visit limits
 - Third-party exclusion and visit limits
 - Automatic exclusion by law
- Regulations on casino advertising and promotion
- Regulations on responsible gaming
- Establishment of the hotline

Both Las Vegas Sands Corp., through Marina Bay Sands and Genting, through Resorts World Sentosa have worked directly with the NCPG and the CRA to adhere to the social safeguards in creating an atmosphere of responsible gaming.

CASINO ENTRY LEVY

The Singapore Government introduced the casino entry levy to remind Singaporeans and permanent residents that gambling is an expense and not a way to make a living. The levy only applies to the entry of the casino. Singaporeans and permanent residents may use other parts of the integrated resort without paying the levy.

The daily entry levy is \$100 SGD and is valid for 24-hour consecutive hours upon entry into the casino; guests can go in and out of the casino freely during that same 24-hour period. If individuals choose to go over the 24-hour limit, they can be fined up to \$1,000 SGD; additionally, individuals must pay the additional daily levy. Singaporeans and permanent residents also have the option of paying a yearly \$2,000 SGD levy that is good for 12 months



from the date of the payment. The levy is specific to the casino and is not interchangeable between the two integrated resorts.

SINGAPORE EXCLUSION POLICY

Exclusion is available in several forms in Singapore. Exclusion applies to Singapore citizens, permanent residents, and foreigners. Exclusion comes in several forms including self-exclusion (Singaporean, permanent resident, or foreigner), family exclusion, third-party exclusion, or automatic exclusion.

Casino self-exclusion is focused on the two integrated resorts of Marina Bay Sands and Resorts World Sentosa and is open to anyone. An individual may also set a voluntary visit limit that is open to Singapore citizens and permanent residents; foreigners are not eligible for this option. Limits are set from one to eight visits per month. Applicants for casino exclusion must remain on the list for a minimum of 12 months. When applying for revocation from the exclusionary list, one of the conditions that individuals must have is a referral for a problem gambling assessment or counseling.

Non-casino self-exclusion covers the three areas of Singapore Pools, Singapore Turf Club, and Jackpot rooms at private clubs (Note that not all private clubs offer the exclusion process.) Exclusion stays in place until one applies to revoke it. Like the casino exclusion, the earliest that anyone can apply for revocation is 12 months after initially applying for self-exclusion. Forms must be witnessed and then submitted to the NCPG.

Singapore is unique in that it offers family and third party exclusion of an individual. Family exclusion or visit limits can be placed only by immediate family members including spouses, children (including adoptive/step children), parents (Including adoptive/step parents), and siblings (including adoptive/step/half-siblings). Those who apply for family exclusion for a family member must attend a hearing to evaluate the exclusion with the Committee of Assessors. Visit limits can also be imposed through this same process. Third party visit limits are aimed at Singapore citizens and permanent residents who are frequent visitors to the casinos. NCPG can be notified of one's financial situation including if they are currently vulnerable or have a poor credit record. This can, in some serious cases, lead to exclusion. There is also automatic exclusion if one has an undischarged bankruptcy, receives financial aid from the government, is more than six months of rental arrears, or legal aid.

At the end of 2015, Singapore had a total of 277,446 people on the casino exclusion list with the majority of those as foreigners (214,767). Family exclusion orders were at 2,116 and



automatic exclusions at 41,849. Voluntary active visit limits were at 1,097 with family visit limits at nine. Third party limits were at 2,012.

PROBLEM GAMBLING PREVALENCE RATES AND CONSIDERATIONS

A variety of stakeholders in Japan have wondered, appropriately, about the effects that increased gambling availability might have on the prevalence of gambling disorders.² For many years, researchers could only speculate on these impacts, but today this field benefits from a nuanced and developing research literature. While Japan has understandably looked to Singapore as a policy model, in fact the literature on disordered gambling prevalence (and many other relevant and related topics) is significantly more advanced today than it was when Singapore was considering integrated resorts.

Today, contrary to earlier beliefs that more gambling access would lead automatically to an ongoing increase in gambling disorders,³ it seems that the relationship between gambling exposure and gambling disorders is non-linear. To be sure, early scholars lamented the limitations of the research tools that were available to them, even as they expressed concerns that more gambling was related to more problematic gambling behaviors.⁴ Fortunately, more recently researchers have benefitted from three developments: first, they have generated more precise operational definitions of key terms; second, they have accessed larger, more complex data sets; and third, they have been able to use more sophisticated research tools with these larger, more complex, and more global observations of these phenomena.⁵

² The official term in the Diagnostic and Statistical Manual of Mental Disorders (5th edition) is “disordered gambling.”

³ For an illustration of one of these early speculations, see Kindt, J. W. (1994). The economic impacts of legalized gambling activities. *Drake Law Review*, 43, 51-95.

⁴ Volberg, R., Harwood, H., Tucker, A., Christiansen, E., Cummings, W., & Sinclair, S. (1999, April 1). Gambling impact and behavior study. Chicago, IL: University of Chicago. Retrieved from <http://www.norc.org/PDFs/publications/GIBSFinalReportApril1999.pdf>

⁵ LaPlante, D. A. & Shaffer, H. J. (2007, October). Understanding the influence of gambling opportunities: Expanding exposure models to include adaptation. *American Journal of Orthopsychiatry*, 77(4), 616-623. doi: 10.1037/0002-9432.77.4.616



The resulting literature provides Japan with solid guideposts for policy considerations.⁶ In applying the enhanced understanding of gambling disorders today, one might start by noting that at least three factors can influence their development: the *host* (the individual gamblers him/herself), the *agent* (the gambling game), and the gambling *environment* (ranging from a simple lottery ticket purchased in a convenience store to complex, massive risk-taking settings like those found in the global stock market). Meanwhile, *exposure* has also been more precisely defined in the literature, and now incorporates important features like distance from the venue, duration of exposure, and type of exposure.⁷

With the growth of this literature, we have seen measurements that suggest increasing, stabilizing, *and* decreasing prevalence rates with increased gambling exposure.⁸ While this may seem confusing at first, in fact this is an understandable development. As it turns out, some relevant evidence suggests that gambling disorders progress like many health problems – in that immediately after exposure, increases in problem prevalence tends to be observed, but then these spikes eventually slow, stabilize, and even decline over time.

With many public health problems at first exposure, it is the vulnerable populations that become “sick” (which is then measured as an increase in prevalence). This is precisely what happens with disease outbreaks: upon exposure, the vulnerable get sick (typically, the young and the old). At this point, however, the sickness has a problem of sorts: having afflicted the vulnerable, it by definition, only has the non-vulnerable left to attack. However, these populations are, also by definition, *less vulnerable* – sometimes significantly so. Worse,

⁶ For a lengthier discussion, see St-Pierre, R., Walker, D., Derevensky, J. & Gupta, R. (2014). How availability and accessibility of gambling venues influence problem gambling: A review of the literature. *Gaming Law Review and Economics*, 18, 150-172.

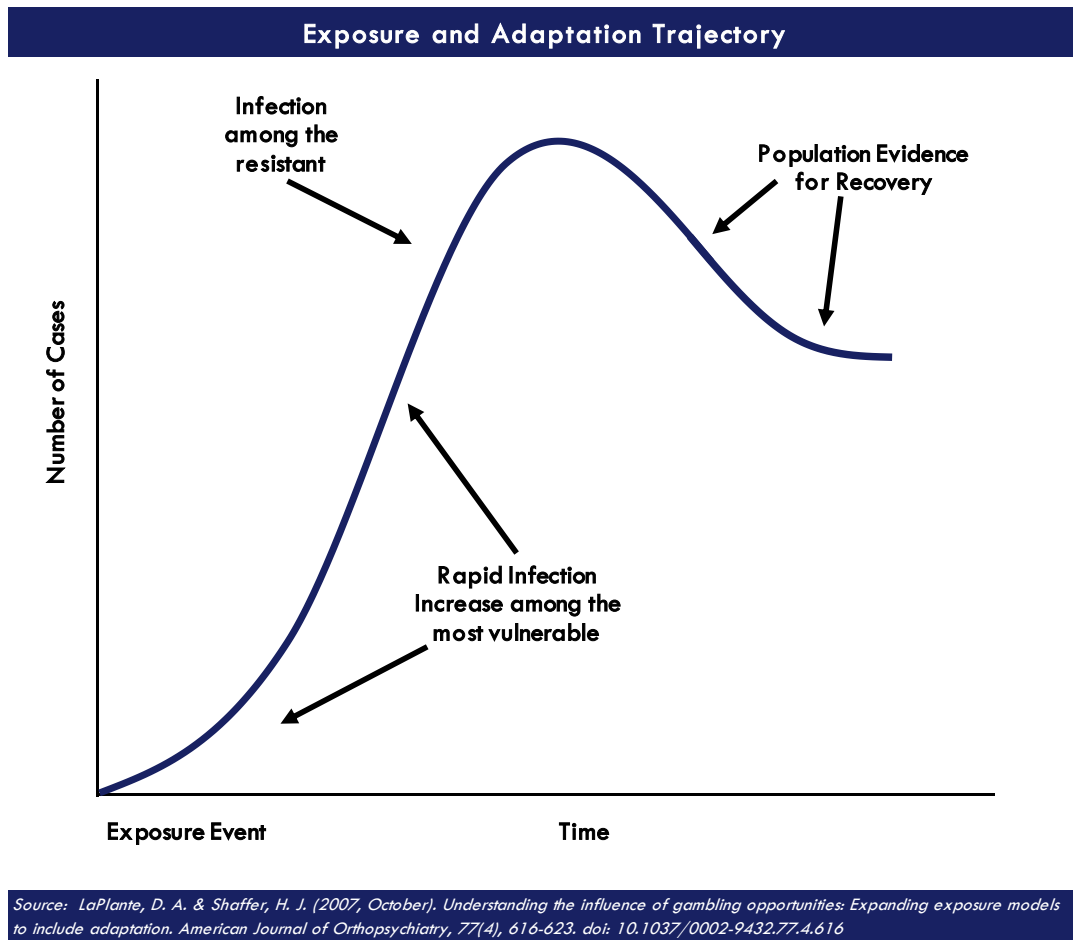
⁷ Shaffer, H. J., LaBrie, R. A., & LaPlante, D. (2004). Laying the foundation for quantifying regional exposure to social phenomena: Considering the case of legalized gambling as a public health toxin. *Psychology of Addictive Behaviors*, 18(1). Retrieved from <http://stoppredatorygambling.org/site/wp-content/uploads/2012/12/Laying-the-Foundation-for-Quantifying-Regional-Exposure-to-Social-Phenomena-Considering-the-Case-of-Legalized-Gambling-as-a-Public-Health-Toxin.pdf>

⁸ Volberg, R. A. (2004). Fifteen years of prevalence research: What do we know? Where do we go? *Journal of Gambling Issues*, 10. doi: 10.4309/jgi.2004.10.12

LaPlante, D. A. & Shaffer, H. J. (2007, October). Understanding the influence of gambling opportunities: Expanding exposure models to include adaptation. *American Journal of Orthopsychiatry*, 77(4), 616-623. doi: 10.1037/0002-9432.77.4.616



another “problem” for the sickness emerges here: as outbreaks are discovered, it is studied and knowledge is dispersed, so that people begin to learn about health risks and potentially become even *less* vulnerable as a result. In the end, it becomes very difficult for a sickness to continue growing in a linear fashion.⁹ This trajectory is summarized below:



It appears that there is emerging evidence that gambling disorders evolve in populations in a manner similar to many other sicknesses: when a population is exposed to gambling for the first time, we see an increase in problem gambling prevalence, and it is typically the vulnerable who are afflicted. However, after this initial spike in rates, we have observed, in a variety of settings, stabilization, and decline.

⁹ LaPlante, D. A. & Shaffer, H. J. (2007, October). Understanding the influence of gambling opportunities: Expanding exposure models to include adaptation. *American Journal of Orthopsychiatry*, 77(4), 616-623. doi: 10.1037/0002-9432.77.4.616.



For instance, in the United States, prevalence rates have remained stable and perhaps even declined during a period of significant gambling expansion. A national 1979 study found a national lifetime rate of 0.7%, while recent comparable figures place this rate at 0.4% to 0.6%.¹⁰ In Switzerland, meanwhile, prevalence rates have remained stable despite the introduction of several casinos over the past 10 years.¹¹ A recent summary of the Macao literature observed that in 2010, 2.8% of survey respondents were found to be probable pathological gamblers, while three years later this rate was lower, at 0.9%.¹² Finally, in Singapore, the first survey commissioned by the government was conducted in 2005, and found that 2.1% of respondents could be classified as probable pathological gamblers. The next study, in 2008, found a rate of 1.2% (though the authors noted that this could be due to statistical fluctuations). In 2011, the government commissioned another study, and found a rate of 1.4% (again citing statistical fluctuations), while the most recent (2014) study found a statistically significant drop to 0.2%.¹³

¹⁰ Kallick, M., Suits, D., Dielman, T., Hybels, J. (1979). *A survey of American gambling attitudes and behavior*. Ann Arbor, MI: University of Michigan Press.

Kessler, R. C., Hwang, I., LaBrie, R., Petukhova, M., Sampson, N. A., Winters, K. C., & Shaffer, H. J. (2008, September). DSM-IV pathological gambling in the National Comorbidity Survey Replication. *Psychological Medicine*, 38(9), 1351-1360. doi: 10.1017/S0033291708002900.

Petry, N. M., Stinson, F. S., & Grant, B. F. (2005, May). Comorbidity of DSM-IV pathological gambling and other psychiatric disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Clinical Psychiatry*, 66(5). Retrieved from <http://www.psychiatrist.com/JCP/article/Pages/2005/v66n05/v66n0504.aspx>.

¹¹ Bondolfi, G., Jermann, F., Ferrero, F., Zullino, D., Osiek, C.H. (2008). Prevalence of pathological gambling in Switzerland after the opening of casinos and the introduction of new preventive legislation. *Acta Psychiatrica Scandinavica*, 117, 236-239.

¹² Chan, C.C., Li, W.W.L., & Leung, E.C.I. (2016). *Problem Gambling in Hong Kong and Macao: Etiology, Prevalence, and Treatment*. Singapore: Springer.

¹³ Singaporean National Council on Problem Gambling (2005, 2008, 2011, 2014). *Report of Survey on Participation in Gambling Activities among Singapore Residents*. Accessed on March 26, 2017 from: <http://www.ncpg.org.sg/en/Pages/Publication.aspx>



These findings suggest that the impacts of gambling expansion on problem gambling rates are complex,¹⁴ and the notion (often expressed, understandably, in Japan) that problem gambling rates will simply and automatically increase over time, and in a linear fashion, has been proven to be unfounded.

A particularly sophisticated “regional exposure model” (REM) has emerged from the scientific literature as well, and helps us understand jurisdictions (like Japan, where Pachinko parlors have long operated), where existing gambling exposure is significant.¹⁵ The REM provides us with quantifications of key variables (such as “dose,” “potency,” and “direction of gambling availability”) to create a standardized index, the Regional Index of Gambling Exposure (RIGE), which can then be applied to better understand prevalence rates.¹⁶ These researchers note that Nevada had the highest exposure score in the United States on the RIGE index – eight times the average exposure rate. As such, we might expect Nevada to have eight times the normal prevalence rates; however, the state’s prevalence rates fall between 0.3–1.0%, which again suggests that exposure alone does not fully explain prevalence.¹⁷

Given these observations in the research literature, we might conclude by contemplating the following:

1. Disordered gambling rates do not simply increase, in a linear fashion, with increased exposure to gambling;

¹⁴St-Pierre, R., Walker, D., Derevensky, J. & Gupta, R. (2014). How availability and accessibility of gambling venues influence problem gambling: A review of the literature. *Gaming Law Review and Economics*, 18, 150-172.

¹⁵ Shaffer, H. J. & Martin, R. (2011, April). Disordered Gambling: Etiology, trajectory, and clinical considerations. *Annual Review of Clinical Psychology*, 7, 483-510. Shaffer, H. J. & Martin, R. (2011, April). Disordered Gambling: Etiology, trajectory, and clinical considerations. *Annual Review of Clinical Psychology*, 7, 483-510.

¹⁶ Shaffer, H. J., LaBrie, R. A., & LaPlante, D. (2004). Laying the foundation for quantifying regional exposure to social phenomena: considering the case of legalized gambling as a public health toxin. *Psychology of Addictive Behaviors*, 18(1), 40.

¹⁷ Shaffer, H. J. & Martin, R. (2011, April). Disordered Gambling: Etiology, trajectory, and clinical considerations. *Annual Review of Clinical Psychology*, 7, 483-510. doi: 10.1146/annurev-clinpsy-040510-143928.



2. In fact, strong evidence suggests that disordered gambling rates stabilize (and can even decline) after initial spikes in the immediate post-exposure period;
3. As such, it is not guaranteed that Japan will see an increase in disordered gambling prevalence rates, given that its “exposure moment” happened long ago with the introduction of widespread Pachinko parlors.

Of course, one pathological gambler is too many, and the suffering that he or she experiences (to say nothing of the family’s suffering) is not to be diminished or dismissed. As discussed in the next section, a coalitional approach to help alleviate this suffering is strongly advised.

CONSIDERATIONS WITH THE SINGAPOREAN ENTRY LEVY

When integrated resorts were first debated in Singapore, a new approach was introduced to the global community of gaming scholars and policymakers: the so-called “entry levy” required of local gamblers. While certainly gaming jurisdictions exist where locals are banned entirely (e.g., the Bahamas, most of South Korea, and until recently, Vietnam)¹⁸, Singapore’s entry fee policy appears to be unique.

The policy’s parameters are laid out in Section 116 of the Casino Control Act, which mandates that all Singaporean citizens and permanent residents pay a \$100 SGD entry levy (as of this writing, this the equivalent of approximately 7,912 Japanese Yen or \$71.68 USD), which is valid for a 24-hour period. Alternatively, these individuals may purchase a \$2,000 SGD entry levy (approximately 158,237 Japanese Yen or \$1,433 USD) that is valid for 12 consecutive months. Patrons who over-stay the levy period are subject to a fine of up to \$1,000 SGD (approximately 79,104 Japanese Yen or \$717 USD), and must also pay any outstanding entry levy amounts due.

This levy allows the “local” patron to enter the casino portion of the integrated resort (he or she is free to visit the rest of the property without paying the levy). The Singaporean government does not claim directly that this policy is a deterrent to problem gamblers.

¹⁸ We would note here that we are unaware of any research literature in support – or in refutation of – these “total ban” approaches to entry.



Instead, the Casino Regulatory Authority states that it seeks “to remind (Singaporeans) that gambling is an expense and not a way to make a living.”¹⁹

As of this writing, the authors are not aware of any peer-reviewed scientific literature on Singapore’s entry levy policies. And while the Singaporean National Council on Problem Gambling takes a strong (and admirable) research-based approach to problem gambling issues, we are unaware of any evaluations that they have conducted of the entry levy either.

Although it is not intended as a “deterrent,” per se, clearly the entry levy is intended as a responsible gambling measure. To this end, and consistent with global best practices, future research should examine the following questions:

1. Is the entry fee policy an effective deterrent for problem gamblers – or more generally, to those who cannot afford to gamble substantial amounts of money?
2. On the other hand, what are the unintended adverse consequences of this policy – for instance, does it make gambling more expensive (and hence more harmful) for poorer populations who have a gambling problem?²⁰

The lone academic area with significant research that focuses on casino access can be found in the self-exclusion literature. While it is beyond the scope of this paper to summarize this literature, research has suggested that some of these policies can have unintended consequences. For instance, while they may seem to provide a strong policy to keep problem gamblers out of gambling settings, lifetime self-exclusion bans are not considered a best practice, as they can deter patrons and problem gamblers from enrolling in the first place.²¹

¹⁹ Singaporean Casino Regulatory Authority, http://www.ifaq.gov.sg/CRA/apps/fcd_faqlmain.aspx?qst=hRhkP9BzcBKnt75r%2B1bopmAANxUYJsZ1XtCavh%2Bg8uifs%2FSSJBsMmvoyLYoMUFhi8YnQacw%2B%2BjNwnofNECQjGSqmp66IsPSLxSPicu9oZYw%2BImNzvBpPnJzMsgYxYPasjWgoZzzlOwJW5PbK%2BX9ZhD3L8u8ZOH#FAQ_33950

²⁰ For a peer-reviewed evaluation of problem gambling policies that have led to unintended consequences, see Bernhard, B.J. & Preston, F.W. (2004). “On the Shoulders of Merton: Potentially Sobering Consequences of Problem Gambling Policy.” *American Behavioral Scientist* 47(11), 1395-1405.

²¹ National Council on Problem Gambling. (2003). Discussion paper on current voluntary exclusion practices. Washington, DC: National Council on Problem Gambling Task Force on Self-Exclusion; Steinberg, M., & Velardo, W. (2002). Preliminary evaluation of a casino self-exclusion program. In *Responsible Gambling Council of Ontario Discovery 2002 Conference*. Niagara Falls, Canada.



It is not difficult to envision the dangers of unintended consequences of the Singaporean Entry Levy. Given what we know about disordered gambling – and “chasing losses” as a diagnostic criterion – it could be that this approach exacerbates the very problems it seeks to solve (at least for some). Consider: if a disordered gambler chases losses, it could be that he or she begins a gambling episode in Singapore already “down” \$100 SGD, which may trigger chasing behavior. As such, we would caution policymakers against committing to well-intentioned (but poorly researched) approaches to this important public health issue.

CULTURAL IMPACT ON RESPONSIBLE GAMING INITIATIVES

It should be emphasized here that responsible gambling is never the sole responsibility of the gambling venue – or any singular stakeholder, for that matter. In fact, to maximize the effectiveness of a disordered gambling “safety net,” a coalitional approach is likely to be a best practice. As with many complex issues, different resources offer different layers of expertise (and access) to the problem gambler and his or her family. For instance, clearly casino operators cannot (and should not) “play doctor,” as they lack the sophisticated expertise necessary to do so, but they can assist patrons in accessing treatment resources. Similarly, educational and prevention programs can often best be delivered by seasoned educational and public health professionals, though these (hopefully research-based) messages can be reinforced in gambling settings.

It should also be pointed out that culture inevitably influences both policy and gambling problems. For example, Canada boasts a government funded universal health care system, while its casinos are generally government-owned crown corporations. In this instance, the government receives economic benefits from gaming operations, but also incurs health care costs associated with problem gambling. Meanwhile, the cultural expectations in Canada (no doubt linked with this economic and political reality) are heightened when it comes to the problem gambling issue.

In Asia, culture is of profound importance when observing and understanding the gambling (and problematic gambling) act. For instance, Singaporeans are accustomed to fairly regular and substantial government-driven policy interventions in everyday life – for many, this reality actually defines Singaporean life. Japan, meanwhile, boasts a quite different relationship between its government and its people – and as such, the Japan government’s ability to impose interventionist approaches to problem gambling may not be as readily assumed as it is in Singapore.



JAPAN'S FUTURE EVALUATION OF RESPONSIBLE GAMING INITIATIVES

As Japan continues to evaluate the next steps in the integrated resort discussion, it is with almost certainty that operators bidding on a license will be evaluated on their current responsible gaming initiatives. They will also be most likely viewed as an active partner in whatever support system and structure that the Japanese government creates to treat problem gaming.

With Singapore as a model, it would be optimal for Japan to evaluate abilities to address problem gambling across all forms of gaming. This would be similar in nature to what the Singapore National Council on Problem Gambling has done with the integrated resorts but also with local options including private clubs, Singapore Pools, and the Singapore Turf Club. In Japan, this would apply not only to the future IRs but also to other forms of gambling including Pachinko and horse racing as a safety net for those that might develop a problem with gambling. There are several factors that should be considered from other jurisdictions including the United States and Macau that offer a solid foundation for an environment of responsible gaming.

Japanese legislators have already submitted some language to handle problem gambling. The Liberal Democratic Party and Komeito will submit a bill during the current session of the Diet. The bill will likely hold the government responsible to cope with problem gaming as well as set up procedures and standards. There will be some form of promotion of these measures as well as discussion over items including restricting admission to facilities, loss limits, and advertising. It is viewed that proposed legislation would also address Pachinko and horse race betting. Earlier this year, the Nippon Ishin no Kai opposition party introduced a bill that calls for the government to establish a basic program and is subject to revision at least once every five years. It also addresses rules for casino advertising, admission charges, having specialized medical professionals, and education through a public relations campaign.

The issue of an entry levy is one that will be debated throughout any discussion in the Diet for the second piece of IR legislation. Current discussions have the rate ranging from a low end of zero or no entry fee to as high as ¥10,000. As noted above, more research should be done on the effects of the levy. While the Singaporeans may have used it for locals and permanent residents as a reminder that “gambling is an expense,” it may have other effects on those that want to gamble or have a problem with gaming.



GMA believes that if any entry levy is used, it should be viewed as a tax to gamble and minimize its overall impact. GMA would propose and will later use though its projections an entry levy of ¥2,000. For purposes of this assessment, it is assumed that players will pay a tax similar to the Singapore model. GMA would recommend that the operator, based off of premium play, may reimburse an entry levy to the player.

Japan will have to evaluate the need for other safeguards, including the use of the levy, exclusionary policies, marketing, training, and treatment. As noted above, Japan has the benefit of additional research since Singapore went through its process over a dozen years ago when it formed the National Council on Problem Gambling. Evidence-based research should be the baseline in which decisions are made and Japan should look to academia, other gaming experts, as well as operators with a proven record in this field in the selection of criteria and responsible gaming programs.



VII. INTEGRATED RESORTS

DEFINING THE INTEGRATED RESORT

The concept of an integrated resort continues to evolve over time. Some of the most grand and iconic buildings around the world are integrated resorts including those in Las Vegas, Macau, and Singapore. Each of these facilities typically costs billions of dollars and includes thousands of hotel rooms, large amounts of meeting and convention space, hundreds of retail stores, dozens of restaurants and bars, theatres, and other entertainment venues covering millions of square feet of space. Some of them even include residences or museums. Integrated resorts all have one common ingredient that makes them function so uniquely – a casino.

From their original roots on the Las Vegas Strip, with the opening of The Mirage in 1989, integrated resorts offer guests an unmatched experience in lodging, shopping, entertainment, meetings and convention space, and other resort amenities. While gaming is centric to the integrated resort model, the casino floor typically takes up a small percentage of the overall site footprint. All of these integrated resorts offer some of the best four and five star hotels in the world with high-end rooms and suites that appeal to very discriminating travelers.

These multi-billion dollar facilities are some of the largest, complex structures that, in the case of Las Vegas and Macau, are clustered together on a “strip” with several IRs next to each other. Both the Las Vegas Strip and the Cotai Strip have several operators bringing a critical mass of visitors to a tourist destination, offering them several resort experiences within a defined area.

Other integrated resorts are limited in number and located in a specific geographic area, as is the case with Singapore. The Singapore government, when making the decision to move forward with integrated resorts, prescribed a limited number of IRs (two) and envisioned them to fill specific niches in an effort to drive tourism. The government of Singapore knew exactly what it wanted to create, based on the locations it had chosen in relationship to the levels of tourism they desired. This has proven to be a model for others to follow.

As Japan looks to define a Japanese version of the integrated resort, education is critical to the future of this debate because stakeholders and the general public in Japan do not necessarily have a true reference point in defining what is an integrated resort. The concept



of an integrated resort is unique in itself, as it is distinctive to each community in which they are located. Japan, as it begins to educate the public on integrated resorts, will start to define the model based on specific locations and overall regulatory structure. These integrated resorts will create billions of dollars in investment in a community and will provide tens of billions of dollars in new construction for the country, which will lead to further investment and expansion of infrastructure.

In an effort to educate stakeholders, GMA reached out directly to major operators of integrated resorts that have shown an interest in the Japan market and asked that they provide examples of some of their own integrated resorts. Starting on the following page are some of the best examples of integrated resorts in the United States, Macau, and Singapore that highlight why these facilities serve as economic and tourism generators, offering guests remarkable experiences.



CAESARS PALACE – LAS VEGAS, NEVADA, U.S.A.



As one of the first integrated resorts on the Las Vegas Strip, Caesars Palace has continually redefined itself since its inception in 1966. The leadership at Caesars molded the property into a modern-day IR with the addition of several hotel towers, one of the premier shopping malls in the United States, and an entertainment venue the hosts some of Las Vegas's top acts. The full facility covers over 464,515 sq m. Caesars boasts nearly 4,000 hotel rooms and suites, offering a wide variety of options for guests with different budgets. Caesars Palace re-defined the shopping experience in the integrated resort with the Forum Shops, which has 170 shops, covering over 63,174 sq m. It is the fourth highest grossing mall, as measured by revenue by square foot, in the United States. The casino, the central point of the facility, has 1,260 slots with 130 table games and includes 16 private rooms over its 13,006 sq m. Caesars Palace also boasts 35 restaurants from a number of celebrity chefs from Gordon Ramsey to Bobby Flay. One of the anchors to Caesars Palace is the Coliseum, an entertainment venue that features Celine Dion as its marquee artist in residence, along with frequent performances by Elton John, Jerry Seinfeld, Mariah Carey, and Rod Stewart.



Sitting in the heart of the Miami/Fort Lauderdale Metro Area, Seminole Hard Rock Hollywood is one of the premier integrated resorts on the east coast of the United States. The four-diamond hotel offers over 500 rooms and suites. One of the anchor amenities to the property is the outdoor entertainment complex that features award-winning restaurants, shops, and other nightlife opportunities. Separate from the other nightlife facilities, two theatres cater to difference audiences: the 5,500-seat theatre for larger acts and a more intimate setting in the 350-seat second venue.

The casino offers guests over 1,900 slots and over 150 table games. Seminole Hard Rock Hollywood also boasts a convention and meeting center as well as a large pool and full service spa.





As one of the two integrated resorts in Singapore, Marina Bay Sands sits as an iconic entrance to Singapore's central business district on Marina Bay and has become one of the most recognizable buildings in the world. Marina Bay Sands is a full-service integrated resort with hotel, retail, meeting and convention space, gaming, entertainment, and a museum.

Marina Bay Sands has three hotel towers with over 2,500 rooms and suites. Sitting atop the three hotel towers is Marina Bay Sands Sky Park. Shaped like a cruise ship, it offers an infinity edge pool and spa for hotel guests, restaurants, lounges and an observation deck. The casino is limited by government regulations to only 15,000 sq m of space and includes 2,500 slots and 600 table games with 35 private gaming areas.

The Shoppes at Marina Bay Sands include over 250 stores and restaurants within 74,000 sq m of space. Between the shops, rooftop and other parts of the property, Marina Bay Sands has 80 restaurants and bars. Marina Bay Sands also has two theatres, 120,000 sq m of MICE space (Meeting and Convention Space), and 15,000 sq m of meeting space within the ArtScience Museum, another unique feature of the property.



CITY OF DREAMS – MACAU, (S.A.R.), CHINA



City of Dreams serves as one of the anchors on the Cotai Strip in Macau, S.A.R, China. The IRs hotels, shopping mall, gaming area, spa, and theatre cover over 696,000 sq m of space. With around 2,200 total rooms, City of Dreams includes three hotels in the Crown Towers, Grand Hyatt, and the Countdown Hotel. The gaming floor contains 800 slots and electronic table games along with 500 VIP and mass-market tables, including 58 private rooms. City of Dreams has 30 restaurants and bars along with over 37,161 sq m of retail with over 150 shops. The House of Dancing Water theatre has seating for 2,000. The property also offers meetings space and the Cubic nightclub.

CITYCENTER – LAS VEGAS, NEVADA, U.S.A.



MGM Resorts International redefined the integrated resort experience in Las Vegas when it opened CityCenter in December 2009. Sitting in the center of the Las Vegas Strip, CityCenter is a hotel, retail, dining, entertainment, gaming, meeting & convention, and residential complex that took urban architecture to a new level. One of the iconic features of CityCenter is \$40 million of artwork located throughout the building campus, making it one of the largest public art displays in North America. The entire complex covers over 1.6 million sq m and includes nearly 5,900 hotel rooms and suites, over 46,400 sq m of retail space, offering some of the highest luxury brands, and over 35 bars and restaurants, including those operated by celebrity chefs and other unique dining concepts. The hotel rooms are located in three exclusive brands including: Aria, Vdara, and Mandarin Oriental with each providing a unique architectural flare. The gaming space of 13,935 sq m includes just over 1,900 slots and 145 table games, which reside at the base of the Aria tower and serves as the focal point of the entire development. CityCenter additionally has over 30,100 sq m of meeting space along with a residential component in the two Veer Towers.



With the opening of Wynn Las Vegas in 2005, Steve Wynn once again reinvented the integrated resort on the Las Vegas Strip. As the architect of the modern day integrated resort, Wynn's mark can be seen up and down the Las Vegas Strip as the integrated resort evolved from 1989 through today.

Wynn Las Vegas offers one of the largest and most luxurious properties featuring two hotel towers in Wynn and Encore that include 4,267 hotel rooms and 483 suites. The property features two main gaming floors for a total of 18,604 sq m square feet of space featuring 1,920 slots, 265 tables, and 17 private rooms.



Housed in approximately 9,197 sq m of exquisitely designed retail space, Wynn Las Vegas is its incredible array of international, exclusive and unique shopping boutiques. It also offers a wide variety of dining and nightlife experiences with 33 restaurants and bars including seven Forbes Four-Star and one Forbes Five-Star restaurants.

Wynn Las Vegas offers an incredible experience with 26,942 sq m of meeting space that brings the outdoors in as they looking out to either the pool area or golf course. The property also features three theatres and an 18-hole championship golf course.

IR SUMMARY

Caesars Entertainment, Hard Rock International, Las Vegas Sands Corp., Melco Resorts & Entertainment, MGM Resorts International, and Wynn Resorts each provided Global Market Advisors with the statistics outlined in the following chart. It highlights the numerous components that go into an integrated resort. The information above outlines that throughout Las Vegas, Macau, Singapore, and Florida an integrated resort is reflective of the individual market. Each facility is unique in the offerings it provides to guests from hotels, retail, meeting and convention space, and other amenities. While the casino remains centric to the overall model, it is a small percentage of the overall facility.

If one was to take the average of all of these integrated resort facilities listed in this report, the facility would have a casino floor that has roughly 18,757 sq m with 1,724 slots and 299 tables. However, there would be over 3,100 hotel rooms and suites, over 41 restaurants and bars, over 44,000 sq m of retail, one to two theatres, a nightclub, over 41,250 sq m of meeting space, and a significant spa and pool area. The integrated resort model allows for a significant project that provides amenities for every guest in an iconic setting with the casino covering a small portion of the overall facility. Japan will create the next version of these significant developments, allowing them to put their own stamp on the future of integrated resorts.

The chart on the following page summarizes the components of each of the highlighted integrated resorts.



Components of an Integrated Resort Examples

	Caesars Entertainment	Hard Rock International	Las Vegas Sands Corp.	Melco Resorts & Entertainment	MGM Resorts International	Wynn Resorts
IR NAME	Caesars Palace	Seminole Hard Rock Hollywood	Marina Bay Sands	City of Dreams	CityCenter	Wynn Las Vegas
Location	Las Vegas, NV, USA	Fort Lauderdale, FL, USA	Singapore, Singapore	Macau S.A.R., China	Las Vegas, NV, USA	Las Vegas, NV, USA
CASINO						
Slots	1,260	1,924	2,500	800	1,940	1,920
Tables	130	153	600	500	145	265
Private Rooms	16	1	35	58	-	17
Gaming Floor Area	13,000 sq m	13,000 sq m	15,000 sq m	39,000 sq m	13,935 sq m	18,604 sq m
HOTEL						
Keys	3,982	545	2,561	1,371	5,891	4,750
Rooms	3,809	462	2,381	1,292	3,771	4,267
Suites	173	83	180	79	2,120	483
Total Area	362,322 sq m	N/A	265,600 sq m	87,165 sq m	N/A	452,590 sq m
RETAIL						
Stores	170	40	250	150	50	36
Total Area	63,673 sq m	32,516 sq m	74,000 sq m	40,240 sq m	46,451 sq m	9,197 sq m
ENTERTAINMENT						
Theatres	1	2	2	1	-	3
Theatre 1 Seating	4,100	5,500	1,679	2,000	-	1,606
Theatre 2 Seating	-	350	2,155	-	-	1,480
Theatre Total Area	17,000 sq m	N/A	21,980 sq m	20,200 sq m	-	12,338 sq m
Other Venues	Nightclub - 3,500 capacity	6 Nightclubs/Comedy	Event Plaza - 10,000 capacity	Nightclub - 1,227 capacity	Nightclub	275-seat Lake of Dreams
FOOD & BEVERAGE						
Restaurants & Bars	35	40	80	30	26	33
Total Seats	3,500	967	N/A	3,146	N/A	3,590
Total Area	18,488 sq m	N/A	N/A	151,216 sq m	N/A	18,116 sq m
MEETING & CONVENTION SPACE						
Meeting Rooms	41	32	250	13	64	39
MICE Area	51,095 sq m	10,405 sq m	120,000 sq m	3,597 sq m	35,535 sq m	53,896 sq m
SPA & POOL						
Spa Area	4,645 sq m	2,508 sq m	1,213 sq m	5,310 sq m	11,613 sq m	9,105 sq m
Pool Area	18,209 sq m	18,210 sq m	1,396 sq m	5,335 sq m	23,690 sq m	N/A

Source: Caesars Entertainment, Hard Rock International, Las Vegas Sands Corp., Melco Resorts & Entertainment, MGM Resorts International, Wynn Resorts



VIII. GAMING REVENUE PROJECTIONS

As Japanese government representatives continue to evaluate the best structure for the introduction of gaming into the Japanese market, it is important to understand how the distribution of gaming revenues, both from the local market and tourism market, could vary depending on how many IRs are authorized. Based on GMA's due diligence, and as discussed earlier, there are a number of specific sites that have been identified that could potentially host an IR. To illustrate the range of revenues, and taking into account the direction in which the legislation appears to be heading, GMA developed the four scenarios. In preparing these projections, GMA introduced the possibility of developing the "Osaka Strip." This scenario would allow the Osaka site to initially host three to four developments, which would increase tourism to Japan and the Osaka region, thereby meeting one of Prime Minister Shinzo Abe's goals of increasing tourism.

Specifically, GMA prepared market-sizing projections for the following development scenarios:

Scenario 1

In Scenario 1, GMA assumed that one IR would be developed in Osaka and one in Yokohama. Specifically, GMA assumed that an IR would be developed at the Yumeshima Island site in Osaka and at the existing dock site located next to Yamashita Park in Yokohama.

Scenario 2

In Scenario 2, GMA assumed that an IR would be developed in Osaka and Yokohama (at same sites as in Scenario 1) as well as in Hokkaido and Sasebo. GMA assumed that these two additional sites would feature a wide array of attractive gaming and non-gaming amenities, with ratios of space at least similar to those in Osaka and Yokohama. GMA assumed the Hokkaido facility would be located at a site between Sapporo and New Chitose Airport, and the Sasebo facility would be located on land currently owned by Huis Ten Bosch theme park.

Scenario 3

In Scenario 3, GMA assumed that the Japanese government would only allow integrated resort development in one market: Osaka. However, in this scenario, GMA assumed that gaming legislation would allow for the development of multiple IR's, similar to what has been developed on Cotai in Macau. In this scenario, GMA envisions that the IR's would be developed in a manner to directly compete with destination integrated resort markets like Macau and Las Vegas. GMA assumed these developments would be located at the



Yumeshima Island site. GMA assumed developing the Osaka Strip, rather than other locations, as the Osaka site appears poised for near immediate development, is the largest of all sites evaluated by GMA, has support by the local government, is already located near other hotels and entertainment activities, and has proximate access to the local population and airports.

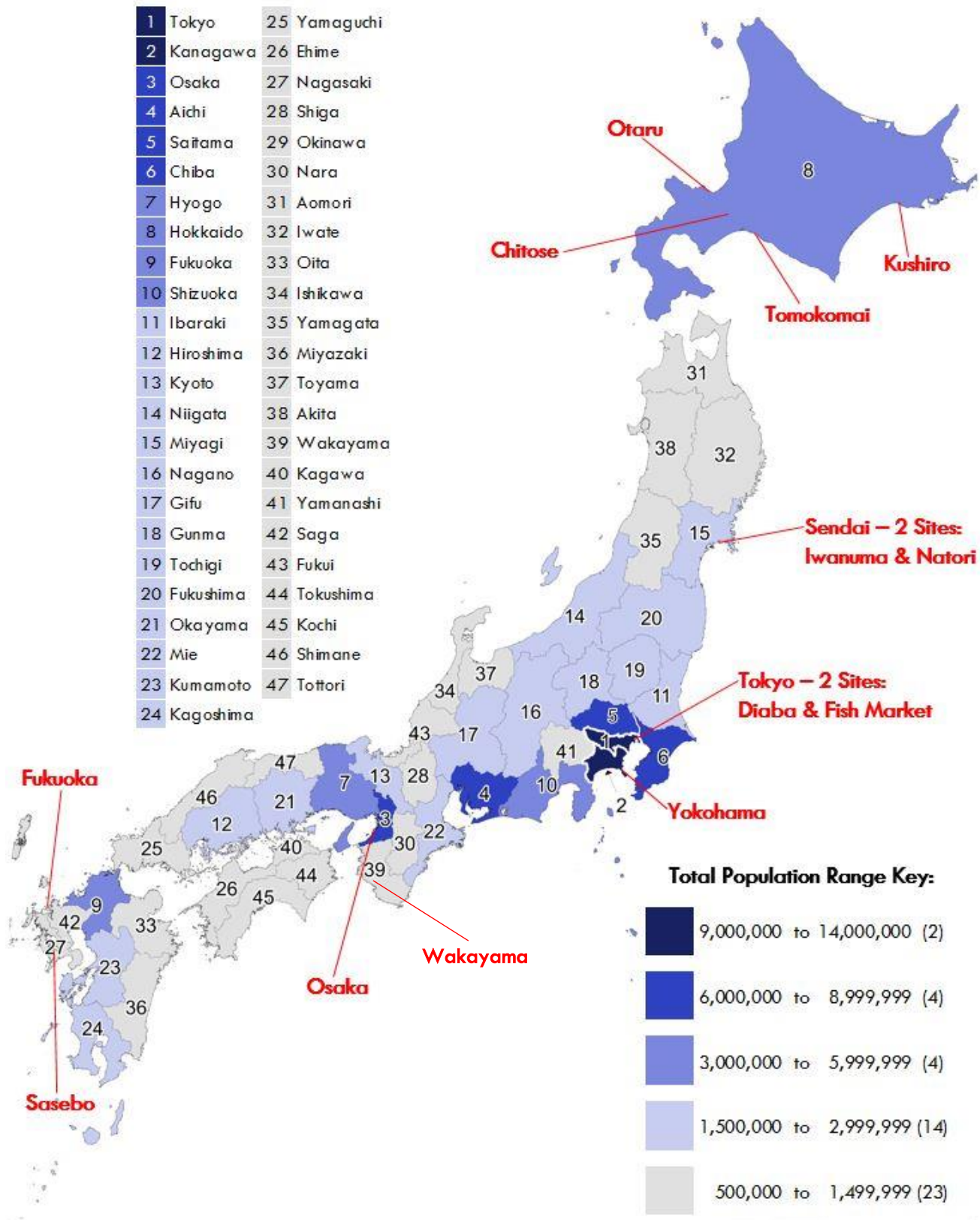
Scenario 4

Scenario 4 assumes the most robust development scenario, in which integrated resort facilities would be developed at the Osaka Strip (as detailed in Scenario 3), at the Daiba site in Tokyo, in Yokohama (as detailed in Scenario 1), in Sasebo (as detailed in Scenario 2), in Hokkaido (as detailed in Scenario 2), and in Sendai at the Natori or Iwanuma sites near the Sendai airport. These projections represent a more fully developed market in which the first set of IRs have been open for a number of years prior to additional facilities coming online.

The map on the following page illustrates the locations of the development scenarios.



1	Tokyo	25	Yamaguchi
2	Kanagawa	26	Ehime
3	Osaka	27	Nagasaki
4	Aichi	28	Shiga
5	Saitama	29	Okinawa
6	Chiba	30	Nara
7	Hyogo	31	Aomori
8	Hokkaido	32	Iwate
9	Fukuoka	33	Oita
10	Shizuoka	34	Ishikawa
11	Ibaraki	35	Yamagata
12	Hiroshima	36	Miyazaki
13	Kyoto	37	Toyama
14	Niigata	38	Akita
15	Miyagi	39	Wakayama
16	Nagano	40	Kagawa
17	Gifu	41	Yamanashi
18	Gunma	42	Saga
19	Tochigi	43	Fukui
20	Fukushima	44	Tokushima
21	Okayama	45	Kochi
22	Mie	46	Shimane
23	Kumamoto	47	Tottori
24	Kagoshima		



OVERARCHING ASSUMPTIONS

In preparing its projections, GMA considered realistic development timelines for each scenario (as presented previously in this white paper). In Scenario 1, Scenario 2, and Scenario 3, GMA prepared gaming revenue projections for 2025, as it was assumed that this would represent the first year of stabilized operations for the IRs assumed in each scenario. In Scenario 4, GMA prepared gaming revenue projections for 2030, as this assumes a more mature gaming market with additional facilities.

In each of the development scenarios, GMA expects the integrated resorts to garner gaming revenue from several sources including the local market, tourism market, and other Japanese market (which captures the amount of gaming revenue that each assumed resort will garner from Japanese patrons who are from outside of the defined local market area). As such, GMA prepared gaming revenue projections for each segment for each assumed integrated resort.

To estimate the amount of gaming revenue that could be generated by each of these segments, GMA made the following major assumptions:

- The assumed IRs will be developed to appropriately fit the community, meet market environment/demand in each scenario, and designed in a manner to maximize tourism to the region. Specifically, GMA assumed each IR development would feature attractive and ample amenity sets, which may include several items in addition to a casino, including perhaps multiple hotel developments of varying quality and positioning, food and beverage outlets, entertainment venues, retail shopping malls, large amounts of convention and meeting space where appropriate, and amenities appropriate to attract the entertainment seeker.
- Each IR is expected to develop a product that is unique and attractive to both the local market and tourism market.
- The Japanese government will implement a tax rate that maximizes each IR's ability to generate gaming revenue and subsequently provide greater levels of gaming revenue taxes to the host community and government.
- Local Japanese will have to pay a ¥2000 Yen entrance fee.
- The Japanese government will follow the same guidelines as set forth by Singapore in terms of restricting certain types of junkets.



- Projections presented in Japanese Yen are assumed to be at the existing exchange rate as of April, 2017.

DOMESTIC MARKET PROJECTIONS

To project the domestic market's contribution to gaming revenue generation in each of the development scenarios, GMA defined a local market area for each assumed IR market by relevant prefecture boundaries. With these boundaries in place, GMA quantified historical and projected adult population and income by prefecture. Once the total local market was defined, GMA then estimated incremental win from the domestic Japanese that was not included in the direct local market.²²

MARKET GAMING FACTORS

With the local market area defined for each facility in each scenario, GMA gathered comparable market statistics detailing the existing levels of gaming market penetration in markets like Singapore, Macau, and the United States. Specifically, GMA noted the gaming revenue per adult ("Win Per Adult") figures achieved by each market. With these penetration benchmarks understood, GMA applied appropriate and traditional gaming factors (including propensity, percentage of income spend on gaming, and capture rates²³) to each defined local market at the prefecture ("market segment") level.

In applying these gaming factors, GMA noted each market segment's proximity and access to the overall market's assumed integrated resort offering. This portion of the analysis allowed the model to take into account transportation infrastructure (road network, railway network, public transportation network, access to airports, etc.), geographic barriers (lakes, rivers, mountains, etc.), and market psychographics (attitudes, aspirations, etc.). Additionally, GMA noted each market segment's exposure to other forms of entertainment and other relevant market characteristics that may alter gaming factor averages. By

²² It is important to note that in order to define income by prefecture, GMA utilized available regional income data as this data was not readily available at the prefecture level. In projecting income levels, GMA assumed that income levels would continue to grow or decline through 2025 at the pace experienced from 2013 to 2016. However, from 2025 to 2030, GMA assumed that income levels would remain stable. Additionally, for purposes of this white paper, GMA utilized the same exchange rate as experienced today.

²³ Propensity represents that percent of the adult population that will visit a casino at least once over a 12-month period. Propensity here does not include Pachinko parlors. % Income Spend on Gaming is calculated as a percentage of a gamer's average annual household income. Capture Rate refers to the percentage of a given market's gaming revenue that a subject casino could expect to receive.



adjusting the gaming factors for each of these items, GMA was able to estimate gaming market penetration and the value of each market in terms of gaming revenue potential.

It is important to note that in performing this analysis, the gaming revenue projections only account for gaming revenue spent on casino style gaming offerings (such as slot machines and table games). Although the model was adjusted to account for existing and anticipated spend levels within the Pachinko market, the market projections presented in this white paper do not include this type of gaming revenue. Furthermore, revenue projections were based on a list of assumptions. It is to be expected that actual gaming revenue projections will change as the RFP process develops. This is due to the fact that as additional detail is developed, such as tax rates, entry levies, development requirements, developers' plans, etc., substantial revisions may be warranted. However, based on the information available today, these represent a realistic view of the market's potential in the short and medium term.

SCENARIO 1: LOCAL MARKET PROJECTIONS

Scenario 1 made the assumption that only two integrated resorts are allowed in Japan, one in Osaka and the second in Yokohama. These two sites were chosen as the local governments support development of IRs at each and each are large enough to support an IR.

SCENARIO 1: OSAKA

In Scenario 1, the single Osaka IR is expected to serve a broad local market, including the primary market segment of Osaka, secondary markets of Hyogo, Kyoto, Nara, and Wakayama, as well as tertiary markets of Shiga, Mie, and Fukui.²⁴ The primary market segment of Osaka is expected to have a total population and adult population of 8.4 million and 7.1 million, respectively, in 2025. Combined, the defined local market is expected to have a total population and adult population of 22.2 million and 18.5 million in 2025. In comparison to other gaming markets across the world, this represents a sizeable population. Furthermore, when considering the income levels in Japan in comparison to other countries, and the relative lack of poverty, these figures present a substantial opportunity.

After applying appropriate gaming factors to each market segment (including propensity, the percentage of income spent on gaming, and the subject facility's capture of available gaming revenue) based on their proximity to the assumed IR's, GMA estimates that the local

²⁴ Each market segment is defined by the prefecture's geographical boundaries.



market will produce approximately \$4.0 billion USD in gaming revenue for the integrated resort in 2025. 59.3% of gaming revenue is expected to stem from the Osaka market segment, while 19.8% and 9.5% of gaming revenue is expected to stem from Hyogo and Kyoto in that year.

GMA expects the local market's gaming revenue per adult ("Win Per Adult") levels to reach \$357 USD in the Osaka market segment, \$191 USD in Hyogo, Kyoto, Nara, and Wakayama, and below \$50 USD in the remaining local market segments.

Projected Local Market Gaming Revenue, Scenario 1: Osaka							
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)
Osaka	Kansai	8,410,039	7,060,354	\$352	\$ 2,338	¥38,714	¥ 256,936
Hyogo	Kansai	5,268,695	4,400,973	\$189	\$ 781	¥20,740	¥ 85,799
Kyoto	Kansai	2,499,460	2,095,756	\$189	\$ 376	¥20,740	¥ 41,292
Nara	Kansai	1,279,718	1,075,974	\$189	\$ 193	¥20,740	¥ 21,200
Wakayama	Kansai	869,182	738,296	\$189	\$ 132	¥20,740	¥ 14,546
Shiga	Kansai	1,398,322	1,137,804	\$38	\$ 41	¥4,148	¥ 4,484
Mie	Kansai	1,714,523	1,428,850	\$44	\$ 60	¥4,839	¥ 6,569
Fukui	Chubu (Hokuriku)	731,030	607,391	\$40	\$ 23	¥4,408	¥ 2,544
TOTAL Local Market		22,170,969	18,545,397	\$213	\$ 3,944	¥23,368	¥ 433,368
<i>Source: National Institute of Population & Social Security Research Japan, GMA</i>							

SCENARIO 1: YOKOHAMA

In Scenario 1, the Yokohama IR is expected to serve an even greater local market population. This IR's primary market segments are expected to include Kanagawa and Tokyo, secondary market segments are expected to include Saitama and Chiba, and tertiary market segments are expected to include Yamanashi, Shizuoka, Ibaraki, Tochigi, and Gunma. The two primary market segments are expected to have a combined total and adult population of 22.2 million and 18.8 million, respectively, in 2025. Overall, the market is expected to have a total and adult population of 45.9 million and 38.6 million, respectively, in the subject year. This represents the largest primary market segment of any study that GMA has ever completed since its inception in 2005.

After applying appropriate gaming factors to each market segment, GMA estimates that the market will produce approximately \$5.6 billion USD in gaming revenue for the subject IR in 2025. 38.8% of gaming revenue is expected to stem from the Tokyo market segment, while 36.6% is expected to stem from the Kanagawa market segment. The facility is also expected to garner large portions of gaming revenue from Saitama, 10.8%, and Chiba, 9.3%.



GMA expects Win Per Adult levels to be lower overall in this market due to larger availability of other forms of entertainment, and in considering access to the site for much of the population. As such, Kanagawa and Tokyo are expected to achieve Win Per Adult levels of approximately \$285 USD and \$204 USD in the subject year. The secondary market segments of Saitama and Chiba are expected to reach Win Per Adult levels of \$109 USD. The remaining local market segments are only expected to generate Win Per Adult levels under \$50 USD in the subject year, due primarily to the time patrons would need to reach the subject facility.

Projected Local Market Gaming Revenue, Scenario 1: Yokohama							
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)
Kanagawa	Kanto	9,009,667	7,543,728	\$281	\$ 2,016	¥30,920	¥ 221,587
Tokyo	Kanto	13,178,672	11,209,767	\$201	\$ 2,140	¥22,085	¥ 235,194
Yamanashi	Chubu (Tokai)	775,908	653,436	\$40	\$ 18	¥4,354	¥ 1,991
Shizuoka	Chubu (Tokai)	3,480,333	2,903,618	\$40	\$ 75	¥4,354	¥ 8,217
Saitama	Kanto	6,991,046	5,854,194	\$107	\$ 596	¥11,779	¥ 65,508
Chiba	Kanto	5,987,027	5,025,403	\$107	\$ 512	¥11,779	¥ 56,234
Ibaraki	Kanto	2,764,115	2,314,762	\$47	\$ 65	¥5,153	¥ 7,157
Tochigi	Kanto	1,867,192	1,558,875	\$47	\$ 44	¥5,153	¥ 4,820
Gunma	Kanto	1,857,908	1,551,021	\$47	\$ 44	¥5,153	¥ 4,796
TOTAL Local Market		45,911,868	38,614,805	\$143	\$ 5,510	¥15,681	¥ 605,504

Source: National Institute of Population & Social Security Research Japan, GMA

SCENARIO 2: LOCAL MARKET PROJECTIONS

Scenario 2 assumes that smaller IRs are authorized in Hokkaido and Sasebo. In this scenario, GMA assumed the same level of local market gaming revenue for Osaka and Yokohama despite the increased overall IR offering in Japan. This is due to the distance between the four assumed IR locations and lack of immediately overlapping local markets. While there would be overlap in some of the remaining population segments not addressed in “local market,” this is addressed later in the report.

SCENARIO 2: SASEBO

In Scenario 2, the Sasebo IR (assumed to be built at Huis ten Bosch) is expected to serve a local market of 12.2 million people, comprised of 10.1 million adults. The local market is expected to include the primary market segments of Nagasaki and Saga, which are expected to account for approximately 1.7 million adults in 2025. Additionally, the local market is expected to include the secondary market segment of Fukuoka (4.0 million adults) and tertiary market segments of Kumamoto, Kagoshima, Oita, and Miyazaki.



After applying appropriate gaming factors to each market segment, GMA estimates that the Sasebo IR will generate approximately \$844.2 million USD in gaming revenue from the local market in 2025. Approximately 43.2% of gaming revenue is expected to stem from Nagasaki and Saga, while the largest portion of gaming revenue is expected to stem from the Fukuoka market segment (47.4%).

GMA expects Win Per Adult levels to be much lower in the Sasebo local market in comparison to the Osaka and Yokohama local markets, with Win Per Adult levels expected to reach \$236 USD in Nagasaki and Saga, \$105 USD in Fukuoka, and less than \$40 USD in the remaining market segments. The following table illustrates the results of this portion of the analysis in greater detail.

Projected Local Market Gaming Revenue, Scenario 2: Sasebo							
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)
Nagasaki	Kyushu	1,250,016	1,045,748	\$236	\$ 222	¥25,946	¥ 24,420
Saga	Kyushu	774,676	636,034	\$236	\$ 143	¥25,946	¥ 15,678
Fukuoka	Kyushu	4,855,724	4,017,500	\$105	\$ 401	¥11,532	¥ 44,012
Kumamoto	Kyushu	1,666,017	1,374,921	\$39	\$ 51	¥4,324	¥ 5,648
Kagoshima	Kyushu	1,521,991	1,258,169	\$16	\$ 15	¥1,730	¥ 1,632
Oita	Kyushu	1,093,634	913,179	\$12	\$ 6	¥1,297	¥ 711
Miyazaki	Kyushu	1,033,671	853,293	\$12	\$ 6	¥1,297	¥ 664
TOTAL Local Market		12,195,729	10,098,843	\$84	\$ 844	¥9,186	¥ 92,765

Source: National Institute of Population & Social Security Research Japan, GMA

SCENARIO 2: HOKKAIDO

In Scenario 2, the Hokkaido IR is expected to serve a comparatively small local market. In total, the local market, which is expected to include Hokkaido, Aomori, Iwate, and Akita, is expected to be comprised of approximately 8.2 million people and 7.0 million adults in 2025. 4.3 million adults are expected to live within the Hokkaido market segment, which is expected to be the Hokkaido IR's primary market segment. Although this is small by Japan standards, this still represents a sizeable population base from which to draw gamers.

After applying appropriate gaming factors to each market segment, GMA expects the Hokkaido IR to generate approximately \$720.1 million USD in gaming revenue in the subject year, with the majority of that revenue generated by the Hokkaido market segment (\$628.8 million USD or 87.3%).



GMA expects Win Per Adult levels to be the lowest of any of the defined local markets in this scenario. The Hokkaido market segment is only expected to achieve a Win Per Adult figure of \$156 USD in the subject year, while the Aomori market segment is expected to garner a Win Per Adult of \$91 USD, and the Iwate and Akita market segments are only expected to garner a Win Per Adult of \$23 USD.

Projected Local Market Gaming Revenue, Scenario 2: Hokkaido							
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)
Hokkaido	Hokkaido	4,959,984	4,251,340	\$156	\$ 629	¥17,108	¥ 69,096
Aomori	Tohoku	1,161,431	996,517	\$91	\$ 68	¥9,954	¥ 7,440
Iwate	Tohoku	1,139,825	966,877	\$23	\$ 13	¥2,489	¥ 1,444
Akita	Tohoku	893,224	773,252	\$23	\$ 11	¥2,489	¥ 1,155
TOTAL Local Market		8,154,464	6,987,987	\$103	\$ 720	¥11,324	¥ 79,135

Source: National Institute of Population & Social Security Research Japan, GMA

SCENARIO 3: LOCAL MARKET PROJECTIONS FOR THE OSAKA STRIP

In Scenario 3, GMA assumed the Japanese market would only feature one gaming destination in Osaka; however, GMA assumed that this destination would feature a number of IR offerings, similar to what is offered in Cotai in Macau. This increased offering will allow Osaka to become a destination for IR-based entertainment. As such, local market gaming revenues (and tourist revenue, in particular as discussed later in this report) are expected to increase under this scenario. These increases are attributed to much larger and diverse offerings being available, resulting in additional non-gaming activities and a variety of brands. Specifically, GMA assumed that three to four full-service IRs would be developed on the large and easily accessible site.

After applying appropriate gaming factors to each market segment to adjust for the increased supply and array of IR options, GMA estimates that the market will produce approximately \$5.7 billion USD in gaming revenue for the Osaka Strip. Approximately 58.3% of local market gaming revenue is expected to be generated by the Osaka market segment, while 20.0% and 9.6% of gaming revenue is expected to stem from the Hyogo and Kyoto market segments, respectively.

In this scenario, GMA expects the local market's Win Per Adult levels to rise to approximately \$503 USD in the Osaka market segment, \$277 USD in Hyogo, Kyoto, Nara, and Wakayama segments, and at or below \$75 USD in the remaining market segments.



Projected Local Market Gaming Revenue, Scenario 3: Osaka Strip								
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)	
Osaka	Kansai	8,410,039	7,060,354	\$503	\$ 3,340	¥55,306	¥ 367,051	
Hyogo	Kansai	5,268,695	4,400,973	\$277	\$ 1,145	¥30,418	¥ 125,838	
Kyoto	Kansai	2,499,460	2,095,756	\$277	\$ 551	¥30,418	¥ 60,562	
Nara	Kansai	1,279,718	1,075,974	\$277	\$ 283	¥30,418	¥ 31,093	
Wakayama	Kansai	869,182	738,296	\$277	\$ 194	¥30,418	¥ 21,335	
Shiga	Kansai	1,398,322	1,137,804	\$66	\$ 71	¥7,259	¥ 7,846	
Mie	Kansai	1,714,523	1,428,850	\$75	\$ 102	¥8,296	¥ 11,261	
Fukui	Chubu (Hokuriku)	731,030	607,391	\$70	\$ 41	¥7,714	¥ 4,451	
TOTAL Local Market		22,170,969	18,545,397	\$309	\$ 5,728	¥33,940	¥ 629,437	
Source: National Institute of Population & Social Security Research Japan, GMA								

SCENARIO 4: LOCAL MARKET PROJECTIONS

In Scenario 4, GMA adjusted local market gaming revenue projections for the assumed introduction of multiple IRs throughout Japan (as detailed previously in this white paper). Additionally, GMA adjusted local market gaming revenue projections for the assumed subject year of this scenario: 2030. This scenario is to represent the more fully developed IR development scenario to illustrate the overall market potential. Of course, if a larger group of casinos were to be distributed across Japan, the overall market potential would be even greater. However, based on current thinking, it appears that the scenario below would represent the largest number of IRs that the Japanese government would contemplate at this juncture.

SCENARIO 4: OSAKA STRIP

In Scenario 4, the Osaka Strip is expected to serve the same broad local market. In 2030, the primary market segment of Osaka is expected to have a total population and adult population of 8.1 million and 6.9 million, respectively. Combined, the defined local market's total and adult population are expected to reach 21.4 million and 18.1 million in that year.

After applying appropriate gaming factors to each market segment, GMA estimates the market will produce approximately \$6.2 billion USD in gaming revenue in this scenario. 57.3% of gaming revenue is expected to stem from the Osaka market segment, while 20.3% and 9.8% of gaming revenue is expected to stem from the Hyogo and Kyoto market segments in that year.



With a widespread opportunity to game in Japan in this scenario, and as the market would have continued to mature over the additional five-year period, GMA expects market penetration rates to increase as the market is expected to be much more mature and experienced with gaming in this scenario. GMA expects Win Per Adult levels to reach \$557 USD in the Osaka market, \$316 USD in Hyogo, Kyoto, Nara, and Wakayama, and below \$100 USD in the remaining local market segments.

Projected Local Market Gaming Revenue, Scenario 4: Osaka Strip							
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)
Osaka	Kansai	8,118,391	6,882,276	\$557	\$ 3,566	¥61,224	¥ 391,863
Hyogo	Kansai	5,088,284	4,293,798	\$316	\$ 1,260	¥34,677	¥ 138,473
Kyoto	Kansai	2,418,108	2,046,347	\$316	\$ 607	¥34,677	¥ 66,703
Nara	Kansai	1,222,563	1,037,857	\$316	\$ 308	¥34,677	¥ 33,830
Wakayama	Kansai	819,680	702,748	\$316	\$ 208	¥34,677	¥ 22,907
Shiga	Kansai	1,375,179	1,131,009	\$86	\$ 91	¥9,457	¥ 10,055
Mie	Kansai	1,649,474	1,387,985	\$98	\$ 128	¥10,771	¥ 14,053
Fukui	Chubu (Hokuriku)	700,185	587,275	\$91	\$ 50	¥10,050	¥ 5,548
TOTAL Local Market		21,391,864	18,069,294	\$344	\$ 6,219	¥37,823	¥ 683,432

Source: National Institute of Population & Social Security Research Japan, GMA

SCENARIO 4: TOKYO

In Scenario 4, the Tokyo IR is expected to serve the same local market population as the Yokohama IR. In total, this local market is expected to account for approximately 44.7 million people and 38.0 million adults in 2030.

After applying appropriate gaming factors to each market segment given the additional market entrant, GMA estimates that the market will produce approximately \$3.9 billion USD in gaming revenue for the Tokyo IR in 2030. 48.2% of the Tokyo IR's gaming revenue is expected to stem from the Tokyo market segment, while the Kanagawa market segment, Saitama market segment, and Chiba market segment are expected to contribute 15.8%, 15.7%, and 13.4% of gaming revenue, respectively.

Given the additional market participant, GMA expects Win Per Adult levels of \$327 USD in Kanagawa, \$281 USD in Tokyo, \$151 USD in Saitama and Chiba, and at or below \$70 USD in the remaining local market segments.



Projected Local Market Gaming Revenue, Scenario 4: Tokyo							
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)
Kanagawa	Kanto	8,833,192	7,471,275	\$327	\$ 612	¥35,985	¥ 67,214
Tokyo	Kanto	12,956,522	11,116,725	\$281	\$ 1,872	¥30,836	¥ 205,678
Yamanashi	Chubu (Tokai)	741,077	630,256	\$57	\$ 7	¥6,298	¥ 794
Shizuoka	Chubu (Tokai)	3,342,558	2,815,588	\$57	\$ 32	¥6,298	¥ 3,547
Saitama	Kanto	6,795,904	5,745,189	\$151	\$ 609	¥16,638	¥ 66,914
Chiba	Kanto	5,806,411	4,920,662	\$151	\$ 522	¥16,638	¥ 57,310
Ibaraki	Kanto	2,661,094	2,250,458	\$70	\$ 103	¥7,709	¥ 11,277
Tochigi	Kanto	1,799,782	1,517,129	\$70	\$ 69	¥7,709	¥ 7,602
Gunma	Kanto	1,787,483	1,506,612	\$70	\$ 58	¥7,709	¥ 6,388
TOTAL Local Market		44,724,023	37,973,892	\$102	\$ 3,883	¥11,237	¥ 426,724

Source: National Institute of Population & Social Security Research Japan, GMA

SCENARIO 4: YOKOHAMA

In Scenario 4, the Yokohama IR is expected to generate less gaming revenue in comparison to Scenario 1 and Scenario 2 due to the introduction of the assumed Tokyo IR. However, the market as a whole is expected to generate a larger level of gaming revenue: \$7.4 billion USD.

Given the new market environment, GMA expects the Yokohama IR to capture approximately \$3.5 billion USD of total local market gaming revenue, with the largest portion of gaming revenue, \$1.7 billion USD or 49.3%, expected to stem from the Kanagawa market segment. GMA expects the Yokohama IR will still maintain a sizeable share of the Tokyo market segment as its assumed site will allow it to accommodate more demand than the assumed Tokyo site will allow. As such, the Tokyo market segment is expected to contribute approximately \$1.1 billion USD in gaming revenue to the Yokohama IR.

Projected Local Market Gaming Revenue, Scenario 4: Yokohama							
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)
Kanagawa	Kanto	8,833,192	7,471,275	\$327	\$ 1,713	¥35,985	¥ 188,200
Tokyo	Kanto	12,956,522	11,116,725	\$281	\$ 1,092	¥30,836	¥ 119,979
Yamanashi	Chubu (Tokai)	741,077	630,256	\$57	\$ 26	¥6,298	¥ 2,878
Shizuoka	Chubu (Tokai)	3,342,558	2,815,588	\$57	\$ 121	¥6,298	¥ 13,300
Saitama	Kanto	6,795,904	5,745,189	\$151	\$ 217	¥16,638	¥ 23,898
Chiba	Kanto	5,806,411	4,920,662	\$151	\$ 186	¥16,638	¥ 20,468
Ibaraki	Kanto	2,661,094	2,250,458	\$70	\$ 47	¥7,709	¥ 5,205
Tochigi	Kanto	1,799,782	1,517,129	\$70	\$ 32	¥7,709	¥ 3,509
Gunma	Kanto	1,787,483	1,506,612	\$70	\$ 42	¥7,709	¥ 4,646
TOTAL Local Market		44,724,023	37,973,892	\$92	\$ 3,477	¥10,062	¥ 382,081

Source: National Institute of Population & Social Security Research Japan, GMA



SCENARIO 4: SASEBO

In Scenario 4, the Sasebo IR is expected to serve a local market of approximately 11.7 million people and 9.8 million adults in 2030, with approximately 1.0 million adults located in Nagasaki in that year. After applying appropriate gaming factors to each market segment given the larger array of gaming opportunities in Japan, GMA estimates that the Sasebo IR will generate approximately \$1.0 billion USD in gaming revenue in 2030, with approximately \$514.9 million USD (49.5%) generated by the Fukuoka market segment and \$421.8 million USD (40.6%) generated by the Nagasaki and Saga market segments.

Projected Local Market Gaming Revenue, Scenario 4: Sasebo								
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)	
Nagasaki	Kyushu	1,184,609	1,000,074	\$284	\$ 255	¥31,189	¥ 28,072	
Saga	Kyushu	744,863	616,916	\$284	\$ 166	¥31,189	¥ 18,279	
Fukuoka	Kyushu	4,718,154	3,940,818	\$138	\$ 515	¥15,115	¥ 56,586	
Kumamoto	Kyushu	1,603,413	1,334,089	\$51	\$ 64	¥5,578	¥ 7,070	
Kagoshima	Kyushu	1,454,431	1,212,368	\$23	\$ 21	¥2,519	¥ 2,291	
Oita	Kyushu	1,049,965	883,560	\$17	\$ 9	¥1,919	¥ 1,018	
Miyazaki	Kyushu	991,365	825,196	\$17	\$ 9	¥1,919	¥ 950	
TOTAL Local Market		11,746,800	9,813,021	\$106	\$ 1,040	¥11,644	¥ 114,265	
Source: National Institute of Population & Social Security Research Japan, GMA								

SCENARIO 4: HOKKAIDO

In Scenario 4, the Hokkaido IR is expected to serve a local market of approximately 7.7 million people and 6.7 million adults in 2030, with a large portion of the population, 4.1 million adults, expected to be located in Hokkaido. In this scenario, it was important to alter the Hokkaido IR's capture of certain market segments due to the assumption of the Sendai IR. After applying appropriate gaming factors to each market segment given the larger array of gaming opportunities in Japan, GMA estimates that the Hokkaido IR will generate approximately \$739.0 million USD in gaming revenue in 2030. 89.0% of local market gaming revenue is expected to be generated by the Hokkaido market segment in that year.



Projected Local Market Gaming Revenue, Scenario 4: Hokkaido								
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)	
Hokkaido	Hokkaido	4,719,100	4,085,264	\$169	\$ 657	¥18,613	¥ 72,236	
Aomori	Tohoku	1,085,119	940,223	\$102	\$ 53	¥11,224	¥ 5,804	
Iwate	Tohoku	1,072,339	917,409	\$92	\$ 17	¥10,153	¥ 1,863	
Akita	Tohoku	827,462	722,224	\$82	\$ 12	¥9,034	¥ 1,305	
TOTAL Local Market		7,704,020	6,665,120	\$111	\$ 739	¥12,184	¥ 81,208	
<i>Source: National Institute of Population & Social Security Research Japan, GMA</i>								

SCENARIO 4: SENDAI

In Scenario 4, the Sendai IR is expected to serve a number of local market segments, including Miyagi, Aomori, Iwate, Akita, Yamagata, and Fukushima. In total, these market segments are expected to be comprised of approximately 7.8 million people and 6.6 million adults in 2030.

After applying appropriate gaming factors to each market segment and adjusting for the expected capture of local market gaming revenue by the Hokkaido IR, GMA estimates that the Sendai IR will generate \$572.4 million USD in gaming revenue in 2030 in this scenario. Approximately 58.0% of gaming revenue is expected to stem from the Miyagi market segment, with approximately 11.5% estimated to be derived from the Fukushima market segment and 10.5% expected to be derived from the Iwate market segment.

Win Per Adult levels are expected to be relatively lower than the other market segments in this market. GMA estimates the Miyagi market segment will generate the largest Win Per Adult level, \$204 USD, in the local market, with the remaining market segments expected to generate a Win Per Adult of \$102 USD or lower.



Projected Local Market Gaming Revenue, Scenario 4: Sendai							
Prefecture	Region	Total Population	Adult Population	Win Per Adult (USD)	Subject Casino Gaming Revenue (USD millions)	Win Per Adult (Yen)	Subject Casino Gaming Revenue (Yen millions)
Miyagi	Tohoku	2,140,710	1,809,108	\$204	\$ 332	¥22,397	¥ 36,467
Aomori	Tohoku	1,085,119	940,223	\$102	\$ 34	¥11,224	¥ 3,693
Iwate	Tohoku	1,072,339	917,409	\$92	\$ 60	¥10,153	¥ 6,614
Akita	Tohoku	827,462	722,224	\$82	\$ 42	¥9,034	¥ 4,567
Yamagata	Tohoku	949,292	808,405	\$61	\$ 40	¥6,719	¥ 4,345
Fukushima	Tohoku	1,684,358	1,430,529	\$61	\$ 66	¥6,719	¥ 7,209
TOTAL Local Market		7,759,280	6,627,898	\$86	\$ 572	¥9,490	¥ 62,896

Source: National Institute of Population & Social Security Research Japan, GMA

OTHER DOMESTIC MARKET GAMING REVENUE PROJECTIONS

In addition to the primary markets as addressed previously, it is expected that each casino would receive incremental revenue from other Japanese living in other parts of the country. As such, GMA prepared other outer market domestic gaming revenue projections for each facility in each scenario to account for the incremental gaming revenue generated by Japanese patrons not captured from the defined local market area. These gaming revenue levels were estimated based on GMA's assumptions for the quality level, sizing, and positioning of each resort in each market as well as comparable facility performance metrics achieved in similar jurisdictions. GMA believes that this additional market would be significantly greater under Scenario 3 and Scenario 4, under which the Osaka Strip is developed as this will create an entire tourist destination with a variety of experiences, versus just one resort. This cluster effect is realized in nearly all tourist destinations, not just in the gaming industry.

Based on GMA's estimates, the non-primary domestic value is estimated at nearly \$0.5 billion USD, increasing to \$3.0 billion USD in Scenario 3, and \$3.6 billion USD under Scenario 4. The following chart summarizes these figures.



Projected Other Outer Market Gaming Revenue Summary (Millions)

IR Site	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
Tokyo	\$	-	\$	-	\$	-	\$	275
Osaka Strip	\$	-	\$	-	\$	3,124	\$	3,059
Osaka	\$	260	\$	208	\$	-	\$	-
Yokohama	\$	190	\$	152	\$	-	\$	110
Sasebo	\$	-	\$	86	\$	-	\$	84
Hokkaido	\$	-	\$	90	\$	-	\$	88
Sendai	\$	-	\$	-	\$	-	\$	18
TOTAL	\$	450	\$	536	\$	3,124	\$	3,633
Tokyo	¥	-	¥	-	¥	-	¥	30,256
Osaka Strip	¥	-	¥	-	¥	343,346	¥	336,103
Osaka	¥	28,612	¥	22,890	¥	-	¥	-
Yokohama	¥	20,841	¥	16,673	¥	-	¥	12,102
Sasebo	¥	-	¥	9,419	¥	-	¥	9,177
Hokkaido	¥	-	¥	9,892	¥	-	¥	9,707
Sendai	¥	-	¥	-	¥	-	¥	1,932
TOTAL	¥	49,453	¥	58,873	¥	343,346	¥	399,277

Source: GMA

LOCAL DOMESTIC MARKET SCENARIO COMPARISON SUMMARY

The following chart summarizes the projected gaming revenues for the total domestic gaming market when combining the primary and outer markets. As can be seen, the more casinos available in the country (Scenarios 2 and 4), the greater the market potential as a higher percentage of the population will have proximate access to casino gaming. However, under Scenario 3, where just the Osaka Strip is developed, significant levels of gaming win are projected as well as this scenario creates a fully enhanced tourism destination with a multitude of available activities.



Projected Domestic Market Gaming Revenue Summary (Millions)

IR Site	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
Tokyo	\$	-	\$	-	\$	-	\$	4,159
Osaka Strip	\$	-	\$	-	\$	8,852	\$	9,278
Osaka	\$	4,204	\$	4,152	\$	-	\$	-
Yokohama	\$	5,700	\$	5,662	\$	-	\$	3,587
Sasebo	\$	-	\$	930	\$	-	\$	1,123
Hokkaido	\$	-	\$	810	\$	-	\$	827
Sendai	\$	-	\$	-	\$	-	\$	590
TOTAL	\$	9,904	\$	11,554	\$	8,852	\$	19,564
Tokyo	¥	-	¥	-	¥	-	¥	456,979
Osaka Strip	¥	-	¥	-	¥	972,782	¥	1,019,535
Osaka	¥	461,981	¥	456,258	¥	-	¥	-
Yokohama	¥	626,345	¥	622,177	¥	-	¥	394,183
Sasebo	¥	-	¥	102,184	¥	-	¥	123,442
Hokkaido	¥	-	¥	89,026	¥	-	¥	90,915
Sendai	¥	-	¥	-	¥	-	¥	64,828
TOTAL	¥	1,088,326	¥	1,269,645	¥	972,782	¥	2,149,882

Source: GMA

INTERNATIONAL TOURISM GAMING REVENUE PROJECTIONS

Japan's strong and growing tourism market is also expected to contribute substantial levels of gaming revenue to its IR offerings. To quantify the tourism market's contribution to gaming revenue, it was first necessary for GMA to evaluate historical tourist arrivals to Japan by country of origin as well as the capture of these tourist arrivals by defined Japanese region (as detailed previously in this white paper). With this information understood, GMA was able to appropriately project tourist arrivals by Japanese region for the defined subject years.

GMA's tourism projections factor in recent tourism trends, along with the assumed induced impact of the proposed introduction of gaming in each scenario. The assumed induced impact was based on GMA's understanding of the impact experienced by other comparable markets, including Singapore, the Philippines, and Macau. It is important to note that in making these projections, GMA assumed that Japan would pass similar laws in terms of limiting Junket operations as in Singapore.



As recent historical tourist arrivals have been increasing drastically, GMA adjusted future market projections to normalize year over year trends. This allowed GMA to take a conservative approach in projecting future tourism by country of origin and region. Even still, GMA was able to align its tourist arrival projections with the government's initiative to attract 60 million foreign tourists by 2030.

With tourism projections completed for each defined subject year, GMA quantified the tourism market's likely contribution to each IR market's gaming revenue in each scenario. To complete this portion of the analysis, GMA assigned appropriate metrics to each region's projected tourism by country of origin, including the percent of tourists that are assumed to be adults, the percent that are expected to visit the defined subject area within the region they are visiting, each IR's capture of available tourists, average gaming spend, and the percent of available gaming revenue captured by the subject IR in each scenario. GMA developed appropriate assumptions for these factors based on its knowledge of what is achieved in other comparable jurisdictions, and divided based on each country's primary population's propensity to gamble. As experienced in many gaming markets, the Chinese segment is expected to be the largest contributor of foreign gaming revenue due to the large levels of Chinese tourism combined with the culture's high proclivity to casino gaming. The following section details the size of the projected tourist market and its contribution to tourism market gaming revenue for each IR in each scenario.

SCENARIO 1: TOURISM MARKET PROJECTIONS

SCENARIO 1: OSAKA

In Scenario 1, the Kansai region (which encompasses Osaka) is projected to garner approximately 14.3 million tourist arrivals in 2025. 42.9% of the tourist arrivals are expected to stem from China, 22.6% are expected to stem from Korea, and 15.9% are expected to stem from Taiwan/Hong Kong.

These three tourist arrival segments are expected to be large contributors to tourism market gaming revenue generation in that year. Tourist arrivals from China, Korea, and Taiwan/Hong Kong are projected to generate approximately \$890.8 million USD, \$144.4 million USD, and \$181.7 million USD, respectively, in gaming revenue for the Osaka IR. In total, the Osaka IR is expected to garner approximately \$1.3 billion USD in gaming revenue from the tourism market in 2025.



Projected Tourism Market Gaming Revenue, Scenario 1: Osaka

Market	Tourist Arrivals	Subject Casino Gaming Revenue (USD millions)	Subject Casino Gaming Revenue (Yen millions)
Kansai Region			
China	6,142,429	\$ 891	¥ 97,895
Korea	3,236,523	\$ 144	¥ 15,871
Taiwan/Hong Kong	2,280,430	\$ 182	¥ 19,969
Other	2,647,923	\$ 52	¥ 5,736
TOTAL Tourism Market	14,307,305	\$ 1,269	¥ 139,472

Source: GMA

SCENARIO 1: YOKOHAMA

In Scenario 1, the Kanto region (which encompasses Yokohama) is expected to generate approximately 16.7 million tourist arrivals in 2025. 38.7% of those tourist arrivals are projected to stem from China, 16.2% are expected to stem from Taiwan/Hong Kong, and 15.2% are expected to stem from Korea.

In total, the Yokohama IR is expected to garner approximately \$1.4 billion USD in gaming revenue from the tourism market, with a vast portion of that gaming revenue expected to stem from tourist arrivals from China (\$939.5 million USD). The next largest tourism market segment in gaming revenue production is expected to be tourist arrivals from Taiwan/Hong Kong (\$216.5 million USD).

Projected Tourism Market Gaming Revenue, Scenario 1: Yokohama

Market	Tourist Arrivals	Subject Casino Gaming Revenue (USD millions)	Subject Casino Gaming Revenue (Yen millions)
Kanto Region			
China	6,477,892	\$ 939	¥ 103,241
Korea	2,543,310	\$ 113	¥ 12,472
Taiwan/Hong Kong	2,717,020	\$ 217	¥ 23,793
Other	5,001,724	\$ 94	¥ 10,328
TOTAL Tourism Market	16,739,946	\$ 1,363	¥ 149,834

Source: GMA



SCENARIO 2: TOURISM MARKET PROJECTIONS

SCENARIO 2: OSAKA

In Scenario 2, the Osaka IR is expected to capture slightly less tourism market gaming revenue as tourists will have more Japanese IR options in this scenario. The reduction is based on the assumption that many tourists to Japan frequent more than one destination while in the country. As such, the more IRs distributed throughout the country, the lower the capture rate would be of each IR of the same tourist. Given the revised assumptions under Scenario 2, GMA projects the Osaka IR will generate \$1.1 billion USD in tourism market gaming revenue in 2025 in this scenario. Tourist arrivals from China are still expected to be the biggest contributor to tourism market gaming revenue in this scenario, estimated at \$764 million USD.

Projected Tourism Market Gaming Revenue, Scenario 2: Osaka				
Market	Tourist Arrivals	Subject Casino Gaming Revenue (USD millions)	Subject Casino Gaming Revenue (Yen millions)	
Kansai Region				
China	6,142,429	\$ 764	¥ 83,910	
Korea	3,236,523	\$ 126	¥ 13,887	
Taiwan/Hong Kong	2,280,430	\$ 164	¥ 17,972	
Other	2,647,923	\$ 45	¥ 4,949	
TOTAL Tourism Market	14,307,305	\$ 1,099	¥ 120,719	
Source: GMA				

SCENARIO 2: YOKOHAMA

In Scenario 2, the Yokohama IR is also expected to capture less tourism market gaming revenue as tourists will have more opportunities to gamble at other Japanese IR's in this scenario. As such, GMA projects the Yokohama IR will generate \$1.2 billion USD in gaming revenue in 2025 in this scenario, with approximately \$805.3 million USD in gaming revenue expected to stem from tourist arrivals from China and \$194.9 million USD expected to stem from tourist arrivals from Taiwan/Hong Kong.



Projected Tourism Market Gaming Revenue, Scenario 2: Yokohama					
Market	Tourist Arrivals	Subject Casino Gaming Revenue (USD millions)		Subject Casino Gaming Revenue (Yen millions)	
Kanto Region					
China	6,477,892	\$	805	¥	88,493
Korea	2,543,310	\$	99	¥	10,913
Taiwan/Hong Kong	2,717,020	\$	195	¥	21,413
Other	5,001,724	\$	81	¥	8,899
TOTAL Tourism Market	16,739,946	\$	1,180	¥	129,718
Source: GMA					

SCENARIO 2: SASEBO

In Scenario 2, the Kyushu region (which encompasses Sasebo) is expected to generate approximately 4.5 million tourist arrivals. A comparatively healthy percentage of these tourists are expected to visit the IR as it is likely that many of these tourists are already going to Huis Ten Bosch, the popular tourist destination at which the IR is assumed to be located. Based on the available tourism data, it is clear that the majority of tourist arrivals will stem from Korea, which is projected to account for approximately 3.1 million tourist arrivals in 2025. The Taiwan/Hong Kong tourist arrival segment is expected to contribute the next largest level of arrivals in that year (616,444).

In total, the tourism market is expected to generate approximately \$316.1 million USD in gaming revenue for the Sasebo IR in 2025. \$172.6 million USD of tourism market gaming revenue is expected to be generated by tourist arrivals from Korea in that year.

Projected Tourism Market Gaming Revenue, Scenario 2: Sasebo					
Market	Tourist Arrivals	Subject Casino Gaming Revenue (USD millions)		Subject Casino Gaming Revenue (Yen millions)	
Kyushu Region					
China	446,181	\$	72	¥	7,948
Korea	3,076,500	\$	173	¥	18,969
Taiwan/Hong Kong	616,444	\$	60	¥	6,637
Other	352,742	\$	11	¥	1,178
TOTAL Tourism Market	4,491,868	\$	316	¥	34,731
Source: GMA					



SCENARIO 2: HOKKAIDO

In Scenario 2, the Hokkaido region is projected to capture approximately 2.6 million tourist arrivals in 2025, with approximately 0.9 million arrivals expected to stem from Taiwan/Hong Kong, 0.8 million arrivals expected to stem from China, and 0.6 million arrivals expected to stem from Korea. Capture rates of these tourists are expected to be comparatively less than other regions, although still estimated to generate strong levels of gaming revenue. The reason for the reduction in capture rate is due to the reason that most of these tourists are visiting Hokkaido, which is for outdoor mountain activities such as skiing, bicycling and climbing. As these activities all take place at least an hour drive from the assumed IR location near the airport, the casino's primary time to capture visitors will be either at the beginning or end of their trips.

In 2025, the tourism market is expected to contribute approximately \$113.9 million USD in gaming revenue to the Hokkaido IR in this scenario. \$59.1 million USD in gaming revenue is expected to stem from tourist arrivals from China, while \$35.7 million USD in gaming revenue is expected to stem from tourist arrivals from Taiwan/Hong Kong.

Projected Tourism Market Gaming Revenue, Scenario 2: Hokkaido					
Market	Tourist Arrivals	Subject Casino Gaming Revenue (USD millions)		Subject Casino Gaming Revenue (Yen millions)	
Hokkaido Region					
China	760,161	\$	59	¥	6,490
Korea	594,838	\$	12	¥	1,367
Taiwan/Hong Kong	853,960	\$	36	¥	3,926
Other	430,822	\$	7	¥	738
TOTAL Tourism Market	2,639,781	\$	114	¥	12,521
Source: GMA					

SCENARIO 3: TOURISM MARKET PROJECTIONS FOR THE OSAKA STRIP

In Scenario 3, the Osaka Strip IRs are expected to garner a large level of tourism market gaming revenue. With the heightened attraction and diversity of the IR offering in Osaka in this scenario, GMA expects the Osaka Strip IRs to generate approximately \$2.0 billion USD in gaming revenue from the tourism market in 2025 with \$1.4 billion USD in gaming revenue expected to stem from tourist arrivals from China. The Osaka Strip will provide another quality gaming and entertainment venue for the worldwide traveler. With the proper product, it would likely evolve into one of the standard spots for international travelers to visit who decide to make Japan their destination for a vacation. Furthermore, the existence



of the Osaka Strip would further help Prime Minister Shinzo Abe reach the achievable goal of 60 million tourists by 2030.

Projected Tourism Market Gaming Revenue, Scenario 3: Osaka Strip				
Market	Tourist Arrivals	Subject Casino Gaming Revenue (USD millions)	Subject Casino Gaming Revenue (Yen millions)	
Kansai Region				
China	6,142,429	\$ 1,400	¥ 153,835	
Korea	3,236,523	\$ 238	¥ 26,188	
Taiwan/Hong Kong	2,280,430	\$ 280	¥ 30,753	
Other	2,647,923	\$ 93	¥ 10,170	
TOTAL Tourism Market	14,307,305	\$ 2,011	¥ 220,946	
Source: GMA				

SCENARIO 4: TOURISM MARKET PROJECTIONS

SCENARIO 4: OSAKA STRIP

In Scenario 4, the Kansai region (which encompasses Osaka) is expected to capture approximately 17.6 million tourist arrivals, with 8.1 million tourist arrivals from China, 3.8 million tourist arrivals from Korea, and 2.6 million tourist arrivals from Taiwan/Hong Kong.

In this scenario, the Osaka Strip is expected to generate approximately \$2.4 billion USD in gaming revenue from the tourism market in 2030. Approximately 69.6% of tourism market gaming revenue is expected to stem from tourist arrivals from China and 13.9% of tourism market gaming revenue is expected to stem from tourist arrivals from Taiwan/Hong Kong.

Projected Tourism Market Gaming Revenue, Scenario 4: Osaka Strip				
Market	Tourist Arrivals	Subject Casino Gaming Revenue (USD millions)	Subject Casino Gaming Revenue (Yen millions)	
Kansai Region				
China	8,102,563	\$ 1,745	¥ 191,765	
Korea	3,752,017	\$ 261	¥ 28,689	
Taiwan/Hong Kong	2,643,643	\$ 307	¥ 33,690	
Other	3,068,895	\$ 101	¥ 11,127	
TOTAL Tourism Market	17,567,118	\$ 2,414	¥ 265,271	
Source: GMA				



SCENARIO 4: TOKYO

In Scenario 4, the Tokyo IR is expected to garner approximately \$1.1 billion USD in tourism market gaming revenue from the available 20.4 million tourists in the Kanto region. A large portion of the tourism market gaming revenue is expected to come from the tourist arrivals from China (\$787.7 million USD) and tourist arrivals from Taiwan/Hong Kong (\$159.6 million USD).

Projected Tourism Market Gaming Revenue, Scenario 4: Tokyo					
		Subject Casino		Subject Casino	
Market	Tourist Arrivals	Gaming Revenue (USD millions)	Gaming Revenue (Yen millions)		
Kanto Region					
China	8,545,076	\$	788	¥	86,562
Korea	2,948,394	\$	81	¥	8,936
Taiwan/Hong Kong	3,149,771	\$	160	¥	17,533
Other	5,796,769	\$	66	¥	7,286
TOTAL Tourism Market	20,440,009	\$	1,095	¥	120,317
Source: GMA					

SCENARIO 4: YOKOHAMA

In Scenario 4, the Yokohama IR is expected to garner a reduced portion of available tourism market gaming revenue due to the new market participant in Tokyo. As such, GMA projects the facility will garner approximately \$516.3 million USD in tourism market revenue in this scenario in 2030 with approximately \$371.4 million USD expected to stem from tourist arrivals from China.

Projected Tourism Market Gaming Revenue, Scenario 4: Yokohama					
	Tourist	Subject Casino		Subject Casino	
Market	Arrivals	Gaming Revenue		Gaming Revenue	
		(USD millions)		(Yen millions)	
Kanto Region					
China	8,545,076	\$	371	¥	40,815
Korea	2,948,394	\$	38	¥	4,213
Taiwan/Hong Kong	3,149,771	\$	75	¥	8,267
Other	5,796,769	\$	31	¥	3,435
TOTAL Tourism Market	20,440,009	\$	516	¥	56,731
Source: GMA					



SCENARIO 4: SASEBO

In Scenario 4, the Kyushu region (which encompasses Sasebo and Huis Ten Bosch) is expected to generate approximately 5.3 million tourist arrivals. A majority of tourist arrivals are expected to stem from Korea, which is projected to account for approximately 3.6 million tourists in 2030. In total, the tourism market is expected to generate approximately \$436.3 million USD in gaming revenue for the Sasebo IR, with approximately \$233.5 million USD of that gaming revenue expected to stem from tourist arrivals from Korea.

Projected Tourism Market Gaming Revenue, Scenario 4: Sasebo					
Market	Tourist Arrivals	Subject Casino		Subject Casino	
		Gaming Revenue (USD millions)	Gaming Revenue (Yen millions)		
Kyushu Region					
China	588,564	\$	107	¥	11,794
Korea	3,566,507	\$	233	¥	25,656
Taiwan/Hong Kong	714,627	\$	80	¥	8,813
Other	408,821	\$	15	¥	1,690
TOTAL Tourism Market	5,278,520	\$	436	¥	47,953
Source: GMA					

SCENARIO 4: HOKKAIDO

In Scenario 4, the Hokkaido region is projected to capture approximately 3.2 million tourist arrivals in 2030, with approximately 2.0 million arrivals expected to stem from China and Taiwan/Hong Kong combined. In total, the tourism market is expected to contribute \$155.7 million USD in gaming revenue to the Hokkaido IR.

Projected Tourism Market Gaming Revenue, Scenario 4: Hokkaido					
		Subject Casino		Subject Casino	
Market	Tourist Arrivals	Gaming Revenue (USD millions)		Gaming Revenue (Yen millions)	
Hokkaido Region					
China	1,002,738	\$	86	¥	9,417
Korea	689,580	\$	16	¥	1,744
Taiwan/Hong Kong	989,974	\$	46	¥	5,006
Other	499,345	\$	9	¥	940
TOTAL Tourism Market	3,181,637	\$	156	¥	17,108
Source: GMA					



SCENARIO 4: SENDAI

In Scenario 4, the Tohoku region (which encompasses Sendai) is expected to garner approximately 0.7 million tourist arrivals in 2030. A large portion of tourist arrivals are expected to stem from Taiwan/Hong Kong and China. In total, the tourism market is only expected to generate approximately \$15.7 million USD in gaming revenue for the Sendai IR.

Projected Tourism Market Gaming Revenue, Scenario 4: Sendai				
Market	Tourist Arrivals	Subject Casino Gaming Revenue (USD millions)	Subject Casino Gaming Revenue (Yen millions)	
Tohoku Region				
China	174,389	\$	8	¥ 874
Korea	83,632	\$	1	¥ 113
Taiwan/Hong Kong	226,007	\$	6	¥ 610
Other	171,746	\$	1	¥ 129
TOTAL Tourism Market	655,774	\$	16	¥ 1,725
<i>Source: GMA</i>				

SCENARIO COMPARISON SUMMARY

The following table illustrates tourism market gaming revenue projections for each IR in each scenario. The greatest level of tourism market gaming revenue is expected to be produced by the Osaka Strip in Scenario 4 (\$2.4 billion USD). The IRs in Scenario 4 are also expected to generate more tourism market gaming revenue than the other three scenarios. However, the IRs are still expected to generate considerable levels of tourism market gaming revenue in each scenario.



Projected Tourism Market Gaming Revenue Summary (Millions)

IR Site	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Tokyo	\$ -	\$ -	\$ -	\$ 1,095
Osaka Strip	\$ -	\$ -	\$ 2,011	\$ 2,414
Osaka	\$ 1,269	\$ 1,099	\$ -	\$ -
Yokohama	\$ 1,363	\$ 1,180	\$ -	\$ 516
Sasebo	\$ -	\$ 316	\$ -	\$ 436
Hokkaido	\$ -	\$ 114	\$ -	\$ 156
Sendai	\$ -	\$ -	\$ -	\$ 16
TOTAL	\$ 2,633	\$ 2,709	\$ 2,011	\$ 4,633
Tokyo	¥ -	¥ -	¥ -	¥ 120,317
Osaka Strip	¥ -	¥ -	¥ 220,946	¥ 265,271
Osaka	¥ 139,472	¥ 120,719	¥ -	¥ -
Yokohama	¥ 149,834	¥ 129,718	¥ -	¥ 56,731
Sasebo	¥ -	¥ 34,731	¥ -	¥ 47,953
Hokkaido	¥ -	¥ 12,521	¥ -	¥ 17,108
Sendai	¥ -	¥ -	¥ -	¥ 1,725
TOTAL	¥ 289,306	¥ 297,688	¥ 220,946	¥ 509,106

Source: GMA

MARKET GAMING REVENUE SUMMARY

The Japanese market's characteristics, including a large population and growing tourism industry, combine to offer a unique opportunity for gaming revenue generation. In addition to gaming revenue, substantial levels of non-gaming revenue are to be expected as well. Depending on the IR and what is planned, these non-gaming revenues could equate to between 15-50% of gaming revenue. In addition, these non-gaming revenues, which could not be achieved with the development of casinos as part of the IRs, are very labor intensive operations, which would further spur strong levels of economic activity for the local host prefectures and Japan overall.

The largest level of gaming revenue is expected to be achieved in Scenario 4, \$24.2 billion USD, as this scenario offers the largest number of participants, and assumes the Osaka Strip. A number of market participants will allow for further market penetration and maturation. GMA estimates that the smallest amount of gaming revenue would be generated in Scenario 1. However, it is important to note that in this scenario the two gaming facilities would still



garner revenue levels that would be among the highest generated in the world. The following table illustrates the amount of gaming revenue generation expected to occur in each of the defined scenarios.

Projected Total Market Gaming Revenue Summary (Millions)				
IR Site	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Tokyo	\$ -	\$ -	\$ -	\$ 5,253
Osaka Strip	\$ -	\$ -	\$ 10,863	\$ 11,692
Osaka	\$ 5,473	\$ 5,250	\$ -	\$ -
Yokohama	\$ 7,063	\$ 6,842	\$ -	\$ 4,103
Sasebo	\$ -	\$ 1,246	\$ -	\$ 1,560
Hokkaido	\$ -	\$ 924	\$ -	\$ 983
Sendai	\$ -	\$ -	\$ -	\$ 606
TOTAL	\$ 12,536	\$ 14,263	\$ 10,863	\$ 24,197
Tokyo	¥ -	¥ -	¥ -	¥ 577,297
Osaka Strip	¥ -	¥ -	¥ 1,193,728	¥ 1,284,806
Osaka	¥ 601,452	¥ 576,977	¥ -	¥ -
Yokohama	¥ 776,179	¥ 751,895	¥ -	¥ 450,915
Sasebo	¥ -	¥ 136,915	¥ -	¥ 171,395
Hokkaido	¥ -	¥ 101,547	¥ -	¥ 108,023
Sendai	¥ -	¥ -	¥ -	¥ 66,554
TOTAL	¥ 1,377,632	¥ 1,567,333	¥ 1,193,728	¥ 2,658,988
<i>Source: GMA</i>				



IX. CAPITAL REQUIREMENTS & FINANCING

As Japan looks toward the development of integrated resorts, it must review the requirements that operator(s) will be asked to contribute to the financial viability of the project. Other jurisdictions around the globe have put in specifics as to the amount of money that needs to be invested, percentage of the facilities with regard to gaming versus non-gaming amenities, and holding operators accountable to the letter on building exactly what they propose through the RFP process.

When a government decides to issue a tender for an integrated resort, they are starting the foundation for a partnership between them and the operator. This includes working with them on the overall development's success and not having the government view them solely as a contributor of tax revenue. It should be viewed more as a profit sharing opportunity based off of the success of the project. Gaming operators, when building a facility in Japan, will be large contributors of investment, job creation, and economic development. The local and national governments will benefit from these developments in terms of revenue, future economic development, and tourism. As a result, any integrated resort development and the legislation put forth in the second IR bill should take into account the needs of the operator to ensure their (and the government's) success in each market.

Throughout the process of writing the legislation, Japan should take the approach of working in conjunction with experienced operators to ensure that the regulations allow for the maximum benefit to be realized in each specific market. For example, operators should have the flexibility to create facilities that are "right sized" to the individual market. Artificial thresholds of a full build out versus a phased-in approach should not be dictated through the issuance of an RFP or within the specific legislation. Operators will instinctively work to create facilities that look to maximize the local opportunity. By putting in minimum facility size or amenity specifics, this could skew what the local area can support. This can also be applied to the amount of capital investment and to avoid putting minimum threshold that operators must spend and/or putting a percentage to gaming versus non-gaming amenities. Each market should be measured on its local merits and potential and not compete against other projects that may be on a different scale.

In a competitive process, the best facilities will naturally evolve. Furthermore, in the issuance of the RFP, the local governments can clearly state their priorities by stating how proposals will be evaluated and scored. The individual market scope and conditions should determine the process regarding the size of the project, the total investment, and even to



the extent of the facility make-up between gaming and non-gaming assets. This is much more a qualitative discussion than a quantitative discussion. The operator should have the flexibility to state their case for the best development possible.

The Singapore RFP process continues to be referenced as one of the models that Japan will use in the framework as they craft their own structure. One of the thresholds that Singapore put into place was a minimum threshold that casino could have as part of the overall facility. By putting an arbitrary number in the site for gaming amenities size, this number can hinder the full development potential of a facility. Major operators throughout the world have developed successful resorts to balance their gaming and non-gaming. As has been demonstrated in the “What is an IR?” section of this paper, the general threshold of these facilities show that the gaming space is minimal to the overall facility but is still centric to the overall integrated resort model. While market conditions vary between Las Vegas, Macau, and Singapore, these facilities all take into account an individual level of gaming requirements needed to meet demand with the gaming customer, as well as provide ample non-gaming amenities for all guests. GMA suggests that if Japan were to place a percentage defining a size that the casino floor cannot exceed in terms of total available square feet, that it chooses a number not less than 10%. The size of the casino floor as well as other amenities will also be determined by the size of the integrated resort in the local market.

In addition to space threshold, the same can be applied to the amount of initial capital that is applied to the project. While many large-scale developers have publicly stated that they would be willing to spend as much as \$10 billion in capital, that number would not be valid in all jurisdictions, and if the tax rate were too high, wouldn’t even be valid in the most valuable market. Whether it is the larger markets of Osaka, Tokyo, and Yokohama, or the more regional markets of Sasebo, Sendai, Hokkaido, Fukuoka, or others, each market will have a different threshold for initial investment as well as the potential for a phased in approach. It is GMA’s belief that operators should be allowed to determine the level of investment into an iconic facility that matches the market and community environment. However, operators should be evaluated on their commitment to a facility and selected based off of putting forward the best case for the site in terms of total investment and realistic revenue potential.

During the Singapore RFP Process, winners of the tender were held to the highest standard by having to build exactly to that which they committed to in the RFP process. This was in terms of not only in components, but architecture as well. While Singapore has some of the best models of integrated resorts, market forces may alter slightly the scope and project



from when a tender is decided through full build out. Japan can take a similar approach but allow the partnership with the operator to allow some flexibility upon justification by the operator, and acceptance by the host jurisdiction. An example would be that if a 2,000 key hotel was proposed in the original tender, but the permitting office will only allow a 500 key hotel, exceptions by the host jurisdictions would need to be made. Alternatively, the license is awarded and then the country enters a recession, now reducing the potential and/or availability of capital. Again, it would be prudent for the host community to work with the developer to accept a project that is built for the revised levels of demand. Operators should be committed to their initial submission but there should be some room for marginal difference once an operator gets into the finished design and construction stages. Operators should be held to a reasonable standard of development while at the same time allowing enough flexibility in the process for unforeseen circumstances.

CREDITABILITY OF AN OPERATOR

Once Japan has established the integrated resorts process and begins to evaluate different operators on their various IR proposals, qualities that will need to be considered include the credibility of the operator, their ability to operate in multiple jurisdictions, and their ability to finance the project. Each project should be capitalized appropriately to finance the project. The operator will need to demonstrate practicality of projections in terms of their overall finances.

Also in evaluating proposals, the levels of leverage that proponents have will need to be considered. Many believe that regardless of the level of equity and leverage position that quality proponent has at the time of submission, that lenders will loan the capital because of huge potential for a strong return in a development in Japan. This case is made based on the widely-believed market potential for Japan, which as GMA defines in this paper is significant. However, as this is a new market, it is possible that a longer period of time is required for the market to mature and/or that the world enters into another recession. The stronger a proponent's balance sheet is, the more likely they will be able to complete the project and successfully operate it into the future despite unexpected, outside forces. Operator will not be able to have the capital raised at the time of award, as the evaluation process is typically too lengthy for firm commitments. However, a thorough review of the proponents' financing plan and balance sheet should be completed to ensure their ability to compete during the RFP process.



DEPLOYMENT OF CAPITAL

Operators should also be evaluated on their success in deploying capital. This is in terms of being efficient in its deployment but also its ability to work across multiple international jurisdictions. The record of an operator can also be viewed by their financial performance over the last 10 years. Japan stakeholders evaluating IR proposers should look at the efficiency that has been used to stay within the means of an original capital budget, the method of financing, and did the previous efforts hit or miss expectation.

As part of the Japan process, it is viewed that most proposals will in some fashion have partners. Through almost every conversation that GMA has had with stakeholders in Japan, they continue to reiterate the point that a Japanese company should be partner in any bid proposal. Those operators that chose to “go it alone” will face a steeper climb if they do not consider this view. All companies that are part of a bid should have their financial ability and capital deployment evaluated to make for the strongest chosen operator. The legislation should allow for both majority and minority stakes from local and foreign entities to provide the highest quality bid and submission.

This is ultimately one of the most important items that must be considered because the structure of the deal determines the ultimate success of the project. The ability to structure the necessary capital for the deal as well as the deployment of it must be done correctly. As the Japanese government assembles its structure through the second IR bill, it must also address the capital requirements and deployment of it. This is another part of the partnership that must occur between operators and the government to have integrated resorts be successful in Japan.



X. DISCLAIMER

Global Market Advisors (“GMA”) has made its best effort to secure accurate information, however, much of the information contained in this report was received from third parties, which GMA did not validate or verify. Accordingly, GMA makes no warranty, real or implied, regarding the data contained in this white paper. This white paper also contains projections of future events based upon certain assumptions. As it is not possible to predict future outcomes with absolute accuracy, these projections should be treated only as estimates of potential future results. Actual results may differ due to unforeseen events. Consequently, GMA assumes no liability for the accuracy of these projections.



XI. SPONSORS

CLAIRVEST GROUP INC.

CLAIRVEST

Clairvest Group Inc. was founded in 1987 as a Canadian-based private equity management firm that invested its own capital in entrepreneurial corporations.

Clairvest combines capital with the considerable experience of its board, consisting of entrepreneurs who have themselves successfully built many companies. Their expertise and experience is brought to bear on every investment opportunity.

As a publicly listed company (TSX: CVG), Clairvest continues to manage its own capital by co-investing alongside the Clairvest Equity Partners funds in private equity investment opportunities originated by its team. Clairvest is also a participant – and a leading investor – in the general partner of Wellington Financial, which provides venture debt and bridge financing to Canadian corporations.

Under the current management team, Clairvest has initiated investments in 42 different companies, accounting for invested capital of over \$1 billion.





With venues in 74 countries, including 174 cafes, 24 hotels and 11 casinos, Hard Rock International (HRI) is one of the most globally recognized companies. Beginning with an Eric Clapton guitar, Hard Rock owns the world's greatest collection of music memorabilia, which is displayed at its locations around the globe. Hard Rock is also known for its collectible fashion and music-related merchandise, Hard Rock Live performance venues and an award-winning website. HRI owns the global trademark for all Hard Rock brands. The company owns, operates and franchises Cafes in iconic cities including London, New York, San Francisco, Sydney and Dubai. HRI also owns, licenses and/or manages hotel/casino properties worldwide. Destinations include the company's two most successful Hotel and Casino properties in Tampa and Hollywood, Fl., both owned and operated by HRI parent company The Seminole Tribe of Florida, as well as other exciting locations including Bali, Chicago, Cancun, Ibiza, Las Vegas, Macau and San Diego. Upcoming new Hard Rock Cafe locations include Valencia, Innsbruck, Yangon and Chengdu. New Hard Rock Hotel projects include Abu Dhabi, Atlanta, Berlin, Dubai, London, Los Cabos, New York City, and Shenzhen, Dalian and Haikou in China.



XII. ABOUT GLOBAL MARKET ADVISORS

Global Market Advisors, LLC provides clients with market feasibility studies, primary research, economic impact studies, due diligence, payroll control, operations analysis, business and marketing plan development, and player reward program design for the gaming, hospitality and tourism industries. The principals and associates of GMA have hands-on experience in nearly all aspects of the gaming industry including domestic and international operations, project development, marketing expertise, and detailed market analysis.

STEVEN M. GALLAWAY

Steve Gallaway is Managing Partner at Global Market Advisors. His areas of expertise include strategic planning, gaming market assessments, hotel and casino feasibility studies, operational reviews and marketing analysis.

Mr. Gallaway has spent his entire career in the gaming and hospitality industry, starting as a valet attendant and eventually rising to chief operating officer and managing partner of a casino in Colorado. Prior to forming GMA, he served as senior vice president of a hospitality consulting firm where he honed his craft in the fields of gaming market assessments and feasibility analysis. During the span of his career, Mr. Gallaway developed hands-on experience in operations management, organizational development, project development, business development, process improvement, contract negotiations, employee development, and customer service training.

In 2005, along with Andrew Klebanow, Mr. Gallaway formed Gaming Market Advisors. In 2014, the firm was rebranded as Global Market Advisors, reflecting the company's evolution as an international gaming, tourism and hospitality consulting firm.

Mr. Gallaway has completed over 300 feasibility studies, with a strong focus on international gaming operations and integrated resort development. Mr. Gallaway has worked on more than 60 projects in Asia, Western and Eastern Europe, the Caribbean, Central America, Canada, and Australia. His knowledge and understanding of emerging markets, particularly those in Asia, has led him to advise institutional investors on new market opportunities in that region, as well as an advisor on established markets. Today, Mr. Gallaway's clients include most public gaming companies, investment banks, private developers and government institutions.

Mr. Gallaway is a visiting lecturer at the University of Nevada Reno's School of Continuing Education where he teaches a class on casino feasibility analysis and marketing



measurement. He is a periodic contributor to Global Gaming Business Magazine and has spoken at G2E Las Vegas, G2E Macau, NIGA, the Asian Gaming Congress and other conferences around the world.

Mr. Gallaway graduated from Boston College with a B.A. in Economics.

BOB BOUGHNER

Bob Boughner brings to GMA substantial experience in the gaming and hospitality industry. Prior to joining GMA as a Senior Partner, he served as Executive Vice President and Chief Business Development Officer of Boyd Gaming Corporation (NYSE: BYD). While at Boyd, he served in a variety of senior executive positions, including general manager of various properties, Senior Vice President of Administration, and Chief Operating Officer. In July 1996, he was elected to the Company's Board of Directors and remains on the board today.

In 1998, Mr. Boughner was appointed Chief Executive Officer of Borgata where he directed the design, development and operations of the \$1.6 billion integrated resort in Atlantic City. The Borgata Hotel Casino and Spa and The Water Club at Borgata became one of the most successful gaming destinations in North America.

Boughner led much of Boyd's expansion into new markets and played key roles in the acquisition of several gaming properties across the United States. He has overseen the design and development of numerous gaming, dining, nightlife and entertainment venues. Boughner also has extensive experience in various administrative disciplines including Information Technologies, Human Resources, Risk Management and Regulatory Compliance.

Bob is active in civic and industry affairs. He served two terms on the Board of Directors of the Las Vegas Convention and Visitors Authority (LVCVA). He was appointed by the Governor of New Jersey and served on the Board of the Casino Reinvestment and Development Authority. In the private sector, Boughner served for twenty years as a Director of Bank of Nevada, formerly BankWest. He currently serves on the board of Southwest Gas Corporation (NYSE:SWX).

In 2007, as a part of Boughner's philanthropic activity, he and the Hotel College at the University of Nevada Las Vegas (UNLV) established the Bob Boughner Career Services Center at UNLV to assist students in the pursuit of employment in the hospitality, tourism and gaming industry



ANDREW M. KLEBANOW

Andrew Klebanow is the Senior Partner at GMA. He specializes in Marketing Plan and Business Plan Development, Market Research, Casino Property Analysis, Service Quality Measurement Programs and Player Rewards Program Design exclusive to the gaming and hospitality industries.

Mr. Klebanow has worked in the hospitality industry since 1975 and in the fields of marketing and business planning since 1991. He earned a Bachelor of Arts degree at New York University and a Master's Degree in Marketing from Cornell University's School of Hotel Administration.

From 1991-1993, he was Director of Marketing at Sahara Gaming Corporation's Hacienda Hotel and Casino and Director of Marketing and Planning for the parent company's Development Group.

Mr. Klebanow also worked as Director of Marketing for Alliance Gaming Corporation where he conducted the initial market research, consumer testing and marketing plan development for Gamblers Bonus, the industry's first cardless slot club for the company's Nevada slot route division. Gamblers Bonus was the first player tracking system that allowed customers to redeem bonus points for game credits at the machine.

As a consultant to Horseshoe Gaming, Klebanow conducted an analysis of the gaming market in Tunica, MS and subsequently prepared its pre-opening business and marketing plans. In addition, Mr. Klebanow wrote the opening marketing plan for the Horseshoe Casino in Bossier City, LA.

From 1996 to 1999, Klebanow was Vice President of Marketing for Santa Fe Gaming Corporation, where he oversaw the marketing efforts for the Santa Fe Hotel and Casino in Las Vegas and the Pioneer Hotel and Gambling Hall in Laughlin, NV. During his tenure at Santa Fe Gaming, his team repositioned both casinos' player rewards programs to better meet the needs of the business. His most recent position was that of Vice President of Marketing at Sam's Town Hotel and Gambling Hall, where he oversaw the repositioning of the 22-year-old gaming property and the re-branding of its player rewards program.

Mr. Klebanow formed his own consulting firm in 2001 and, together with Mr. Gallaway, formed Gaming Market Advisors in 2005. In 2013, Gaming Market Advisors acquired the



consulting firm Galaviz and Co, and rebranded itself as Global Market Advisors, where Mr. Klebanow is a partner today.

Mr. Klebanow is a periodic lecturer at Cornell University's School of Hotel Administration, the University of Nevada Las Vegas and the University of Nevada Reno's School of Continuing Education. Mr. Klebanow has authored over 100 articles in *Indian Gaming Magazine*, *Global Gaming Business*, *In Asian Gaming* and in the online gaming publication *Urbino.net*. He has also contributed academic papers to the Cornell University Hotel and *Restaurant Quarterly* and the *UNLV Hospitality Journal*. Mr. Klebanow has written extensively on the subject of player reinvestment and has developed methodologies for calculating a casino's player reinvestment rate. Recently, he focused his attention on casino development in urban environments and published a paper on that subject.

Over the past twenty years Mr. Klebanow has spoken at a number of gaming conferences. More recently, he delivered a presentation on Player Reinvestment and Tiered Player Reward Program Design at the Asian Gaming Congress 2010 and on Casino Development in Eastern Russia in 2012. At G2E Asia 2010 he delivered a one hour presentation entitled "Say My Name: The Application of Loyalty Programs in Asia." He also served as a panelist at G2E Asia 2011 on the Korean gaming market and in 2012 on the Manila gaming market. In 2013, he moderated a panel on marketing communications in Asia.

Mr. Klebanow has also moderated panels and shared the lecture podium at G2E Las Vegas. In 2012, he moderated a panel discussion entitled "Risk and Rewards: Understanding Player Reinvestment." In 2013, he conducted a seminar entitled, "An Introduction to Casino Operations," and spoke as a panelist in a session on Trends in Asian Tourism.

In April of 2015, he presented a paper entitled "Casinos and the City" at the Third Annual Asia Pacific Conference on Gambling and Commercial Gaming Research in Beijing and moderated a panel on Trends in Electronic Casino Marketing Communications at the Casino Marketing and Technology Conference in Las Vegas. Most recently, he published a paper that proposed strategies to grow international tourism into Las Vegas.

KIT L. SZYBALA

Kit Szybala graduated from Southern Methodist University as a Hunt Leadership Scholar with degrees in Finance and International Studies giving him a thorough understanding of international business and financial modeling. While studying at the university, Mr. Szybala also gained extensive experience abroad, both working for Oracle Corporation in London,



United Kingdom and studying at the University of Oxford. While with Oracle Corporation, Mr. Szybala worked alongside the Senior Director of Marketing and Vice President of Technology Marketing for EMEA as a Marketing Analyst. Mr. Szybala monitored and improved the efficiency of their marketing programs by utilizing Customer Relationship Management software.

Immediately following his time at Southern Methodist University, Mr. Szybala began working for Vail Resorts as a member of the Vail Resorts College Program. This Program gave him valuable insight into hospitality management and operations by giving him various opportunities to meet with chief members of resort management. It also afforded him the ability to work in several different capacities for the corporation, giving him the opportunity to understand the intricacies of the varying moving parts of resort operations.

In 2012, Mr. Szybala began working for Global Market Advisors. Currently, he serves as the company's Director of Research and Analysis. At Global Market Advisors, Mr. Szybala has created over 125 robust financial models in various gaming markets across the globe. In addition to these financial models, Mr. Szybala has written a multitude of extensive, analytical reports, including feasibility studies, impact and cannibalization studies, gaming market assessments and strategic planning assessments. Additionally, Mr. Szybala is a visiting lecturer at the School of Continuing Education at the University of Nevada, Reno where he teaches a class on casino feasibility analysis and is a contributor to Global Gaming Business Magazine. Mr. Szybala also recently authored a white paper entitled "Gaming in India: An Evaluation of the Market's Potential," providing an in-depth analysis of existing market conditions and the market's potential.

WILLIAM BRYSON

Bill Bryson has practiced law in New York and Taipei for over 25 years, and is recognized as a leading lawyer in the fields of gaming, hospitality, real estate development, mergers and acquisitions and financial transactions.

Mr. Bryson has extensive experience in the representation of local and foreign hospitality industry clients in their operations and investments, both in Taiwan and throughout Asia. Bill has represented casino gaming companies, gaming machine manufacturers and consultants to the industry in Taiwan and 38 other jurisdictions on a variety of issues, including:

- Corporate Structuring
- Taxes
- Employment Issues



- Marketing Restrictions
- Internet/Interactive Gaming
- Debt Collection
- Gaming Development

In connection with prior and ongoing efforts by Taiwan to legalize casino gaming, Mr. Bryson has represented several gaming industry clients in connection with possible gaming development projects in Taiwan. These representations have involved due diligence on potential joint venture partners, negotiation of joint venture and deal documentation, due diligence on potential casino gaming locations, reviewing and commenting on draft laws and regulations, and preparing background materials for, and participating in, client lobbying efforts and meetings with government officials.

He has been acknowledged by Chambers Asia Pacific as a leading gaming lawyer in the region, and by Chambers Global as a leading lawyer in the global gaming industry. He has been a speaker at both the Asian Gaming Congress and G2E Asia, and currently serves on the Advisory Board of the Center for Research on Gaming and Lotteries, a division of the School of Business Administration at the National Taiwan University of Science and Technology.

Mr. Bryson has also represented non-gaming interests in the hospitality industry, including both local hotel owners and foreign management companies. Bill's roles in such representations have included assisting local owners in the negotiation of letters of intent, hotel operation agreements, management agreements, franchise agreements, technical services agreements, and pre-opening services agreements. He has assisted foreign management companies in similar transactions, as well as in termination scenarios (including related hand-over issues) and owner insolvency proceedings.

Bill's merger and acquisitions, financing and real estate experience includes many "first of a kind" deals in Greater China, including the first-ever sale/leaseback of a commercial building in Taiwan, the first multi-jurisdiction acquisition of non-performing loans in Taiwan, the first acquisition of non-performing loans in China by a foreign investor, the first cross-border limited recourse financing led by Taiwanese banks, the first acquisition of a listed local shipping company by a foreign investor, the first acquisition of a substantial stake in a local financial holding company by a Japanese bank, the largest (by value) acquisition of commercial real estate by a foreign investor in Taiwan, and the acquisition of a local Internet Service Provider by an American internet company. Bill has been acknowledged as a leading



lawyer in M&A, real estate, and finance by Chambers Asia Pacific, Asia Pacific Legal 500, and AsiaLaw magazine's Leading Lawyers Survey.

Along with his gaming, hospitality and transactional experience, Mr. Bryson also brings with him extensive experience in public advocacy. As a member of the Government Relations Committee of the American Chamber of Commerce in Taipei, as well as his roles as Chairman of the Private Equity Committee and member of the Travel and Tourism Committee, Bill has, for the past 20 years, been a regular and central member of the Chamber's advocacy efforts on behalf of foreign companies in Taiwan. Mr. Bryson's advocacy experience includes working with both local and US government officials on issues of importance to American companies in Taiwan, reviewing and revising draft legislation and regulations, developing advocacy strategies for both clients and industry groups, and being an editor of the Chamber's annual Taiwan White Paper, a collection of position papers produced by the Chamber's industry Committees. His efforts on behalf of foreign companies in Taiwan have been recognized by the American Chamber of Commerce with two Outstanding Achievement Awards.

SHAUN MCCAMLEY

Shaun McCamley brings over 37 years' experience in the land based and digital gaming industries. Shaun's areas of expertise include interactive gaming consultancy, international marketing, player development, casino operations, casino resort pre-opening, manpower management and development, and team development. Recently, Shaun was recognized by Global Gaming Business Magazine as one of the top 25 industry people to watch in 2015.

Prior to joining Global Market Advisors Mr. McCamley was President of the Ho Tram Resort & Casino in Ho Tram, Vietnam. Reporting to the Chairman and Board of Directors, he was responsible for driving overall revenues and P&L objectives of this USD \$4 billion development. He worked closely with the Board, evaluating opportunities to improve the financial performance of the property, and was responsible for the overall management of all facilities including, but not limited to the hotel, casino, food & beverage outlets, spa and the Bluffs, a Greg Norman designed golf course. The property employed 1,700 management and staff.

Previously, Mr. McCamley worked as CEO and General Manager of several major far east-based consultancies. During that time, he was commissioned to establish international casino resort destinations in Perth, Australia; Subic Bay, Philippines; Tinian, NMI; and the former Republic of Yugoslavia.



As a pioneer and early operator in digital gaming, he formed Saturn Gaming and BingoWorkz, which developed and operated the internet's first networked gaming solution. Subsequently, he formed Euro-Pacific-Asia Management Consulting, a Macau based firm that provided casino management services and turn-key solutions to the land based and digital gaming industries.

Over the past decade, Mr. McCamley was invited to serve as a keynote speaker and panelist at major gaming conferences around the world and continues to consult to the industries' major land based and digital gaming operators. Mr. McCamley is a holder of key management gaming licenses issued in the United States and Australia.

BRENDAN D. BUSSMANN

Brendan Bussmann serves as Director of Government Affairs for Global Market Advisors. Bussmann brought to GMA over 20 years of government/public affairs, political analysis, and business development experience. He has worked on projects and with organizations in North America, Europe, and Asia.

Mr. Bussmann spent over six years at Las Vegas Sands Corp. (LVS) where he served as Director of Government Relations and Community Development. While at Sands, Mr. Bussmann was integral in securing gaming licenses in Singapore and Pennsylvania. He also worked in other jurisdictions in the United States, Europe, and Asia to evaluate opportunities as well as work legislatively to allow integrated resorts. He also oversaw several ballot initiatives while accomplishing several domestic and international legislative victories.

During his tenure at LVS, he also constructed the company's responsible gaming and community development program. Mr. Bussmann worked with Harvard Medical School's Division on Addictions and University of Nevada Las Vegas International Gaming Institute to create an evidence-based responsible gaming program for patrons and employees. He also assembled the global community development program in partnership with stakeholders and charitable giving opportunities.

In 2015, Mr. Bussmann founded his own public affairs and strategic development consulting firm focusing on domestic and international opportunities for clients where he successfully implements strategies as well as develop and expand new markets for various clients. He additionally provides political consulting to candidates from the local to national levels. Prior to starting his own firm, he served also worked for the two largest hospitals in the Las Vegas



market. He served as Vice President of Strategic Development and Marketing for Sunrise Hospital & Medical Center and Sunrise Children's Hospital where he doubled EBITDA in a two-year period while also improving their image and relationship with the community and media. Prior to Sunrise, Mr. Bussmann served as Director of Community Relations with University Medical Center where he built the external affairs program from scratch.

Mr. Bussmann is a graduate of the University of Nebraska-Lincoln. He is deeply involved in the local Las Vegas community through his involvement with the University of Nevada Las Vegas, the Las Vegas Metro Chamber of Commerce, Clark County School District, Las Vegas HEALS, the March of Dimes, Andson Foundation, and Nevada Childseekers.

OTHER CONTRIBUTORS TO WHITE PAPER

BO J. BERNHARD PHD

Over his twenty-year career examining the impacts of the global gaming industry, Dr. Bo Bernhard has worked on all six inhabited continents and in more than 50 jurisdictions overall. He began his research career during his years as an undergraduate at Harvard University, where he authored a double-major *magna cum laude* thesis on gambling and problem gambling behavior.

In his current role as Executive Director at UNLV's International Gaming Institute, he has delivered over 200 keynote addresses to global government, industry, regulatory, and policy leaders, and his work has been featured on *CNN*, *ABC*, *CBS*, *The Discovery Channel*, *The History Channel*, and major national news networks in Canada, Australia, and throughout Asia. He has published in the top journals in both the business sciences (including *Cornell Quarterly*) and the social sciences (including a guest edited special volume of *American Behavioral Scientist*), and he currently serves as Executive Editor for a leading peer-reviewed gaming journal, *Gaming Research and Review*. In 2013, he took over the leadership of the gambling research field's largest, oldest, and most prestigious international research conference, the *International Conference on Gambling and Risk Taking*, an event founded in 1974 by Dr. Bernhard's mentor, Dr. Bill Eadington. In addition, he is co-moderator of the global gaming industry's largest, oldest, and most prestigious leadership development academy, the Executive Development Program, which recently celebrated its 25th anniversary.

Over the course of his career, Dr. Bernhard's teaching and research work has earned him several awards: he won the inaugural Nevada Council on Problem Gambling Shannon Bybee



Award in honor of his problem gambling research; the UNLV Barrick Scholar Award, awarded to the top young researcher at the university; the World Affairs Council's International Educator of the Year award for his classroom focus on gaming's globalization; the UNLV Spanos Award (given to the university's top teacher); the UNLV Hotel College's Boyd Distinguished Professorship for Research (awarded to the college's top researcher); the UNLV Presidential Research Award (given to the university's top researchers); the Ace Denken Award for career excellence in research; and he was awarded one of the inaugural fellowships at both the Brookings Institution's Mountain West Institute and the UNLV CoRE (Collaborative Research and Education) initiative. This past year, he was given the prestigious Satre Chair for Gaming Studies at both the University of Nevada, Reno and the University of Nevada, Las Vegas.

KAZUAKI SASAKI, PH.D.

Kazuaki Sasaki, PhD is an Associate Professor with Toyo University in the Department of International Tourism Management. He serves also as the Director of IR (Integrated Resort) Gaming Society. Sasaki specializes in corporate management within the hospitality industry and also conducted research on gaming companies.

In April 2012 at the Joint Session of the Cabinet, Ministry of Justice, and Ministry of Land, Infrastructure, and Transportation on integrated resorts, he provided his opinion as a reference on efforts by various countries on the societal cost of casinos. He additionally provided commentary on potential safety nets that may accompany legalization of casinos in Japan. Sasaki has been a part of the integrated resort debate for a number of years. Sasaki is an academic member Asia Pacific Association for Gambling Studies in Macau and director of the Japan Academic Society of Hospitality Management.

Sasaki has completed the Executive Development Program with the Institute for the Study of Gambling and Commercial Gaming, a partnership between the University of Nevada, Reno and the University of Nevada Las Vegas. He has additionally conducted research on behalf of the Ministry of Education, research representative of Platform C "Casinos as a Tourism Asset." This was the first time in Japan that research grant-in-aid was subsidized for research on casinos as the main subject.

Sasaki has presented at numerous international conferences including the International Conference on Gambling and Risk Taking (2006, 2009, 2013, 2016), Japan Gaming Congress (2014), G2E Asia (2013, 2014), Global Gaming Expo (2012) and the International Conference on Gambling (New Zealand, 2006).

