

Public Law 35-5 and Recreational Marijuana  
An Economic Impact Assessment to Guam's Tourism Industry  
By Guam Visitors Bureau Management

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**INTRODUCTION** The legal use of cannabis in Guam, medicinal and recreational, has been discussed for many years following its legalization in many U.S. and foreign jurisdictions. This management assessment was made to better understand the impact that recreational use of marijuana will have on the tourism industry.

**OBJECTIVES** 1) Ascertain the impact of recreational marijuana to the island's tourism industry;  
and 2) Evaluate the estimated costs and benefits in relation to the legalization of recreational marijuana

**KEY POINTS FOR CONSIDERATION:**

- About 90% of the island's visitors come Japan, South Korea, and Taiwan, countries where cannabis is illegal and penalties severe, the exception being medicinal use under strict regulation. Recreational cannabis, or any association thereof, is not only prohibited but socially deemed unacceptable.
- The economic benefits from a newly established cannabis industry have been documented by an independent study commissioned and paid for by the GVB, as mandated by PL 35-5, and submitted to the Guam Legislature through the Cannabis Control Board on October 19, 2020.
- Korea 1976 Cannabis Control Act singled out marijuana and outlawed smoking and possession of all cannabis. Smokers can face 5 years in prison and fines of more than \$40,000
- Government will arrest citizens for using marijuana in Canada and other places where recreational cannabis is legal
- Value system of the West is fundamentally different from those in the East.
  - Customs, traditions, mannerisms, non-verbal communication
  - Social and ethnic sensitivities
  - Guam core customers are more of Eastern orientation versus Western
- Laws in Japan, Korea, and Taiwan
  - Japan - Cannabis Control Law
    - Citizens warned that Japanese law may apply while overseas (Japan Times, October 22, 2018: As Canada legalizes recreational marijuana, Japanese citizens warned the law from home may apply, (<https://www.japantimes.co.jp/news/2018/10/22/national/canada-legalizes-recreational-marijuana-japanese-citizens-warned-law-home-may-apply/>) and Seniseeds June 2, 2020: (<https://sensiseeds.com/en/blog/countries/cannabis-in-japan-laws-use-history/>)
    - Punishment ranges from 5 - 10 years. For reference the maximum penalty for selling opium is 7 years. (<https://oharalaw->

[japan.com/2016/02/24/what-is-the-punishment-for-possessing-marijuana-in-japan/](http://japan.com/2016/02/24/what-is-the-punishment-for-possessing-marijuana-in-japan/))

- Korea - Marijuana Control Act
  - One of the most restrictive nations in regulation of cannabis
  - Citizens also warned about consumption while overseas (<https://www.usnews.com/news/best-countries/articles/2018-12-12/south-korea-is-the-first-east-asian-country-to-legalize-medical-cannabis>)
  - First East Asian country to legalize cannabis for medical use.
  - Medical use tightly regulated. Patient required to apply and submit detailed medical records to include doctor's diagnosis, dosage, and doctor's letter stating that no other substitute medicine is available (<http://dis.hanyang.ac.kr/lyceum-vol-1/marijuana-in-the-korean-political-landscape/>)
- Taiwan - Narcotics Hazard Prevention Act (<https://law.moj.gov.tw/ENG/LawClass/LawAll.aspx?pcode=C0000008>)
  - Offenders of manufacturing, transporting, or selling are subject to life imprisonment or a minimum ten-year fixed-term imprisonment, and may also be subject to a fine of no more than fifteen million New Taiwan dollars.
  - Compelling use by others also punishable by 7 years to life imprisonment and may be fined 7 million New Taiwan dollars
  - Usage results in jail time of 3 years.

## METHODOLOGY

- Consultations with, and opinions gathered, from travel industry suppliers and demand distribution channels that include individual and collective views of the GHRA, GVB, JGTA, KGTA
- Specific market segments were identified and sensitized to actual arrivals in FY 2019. Sensitivity assumptions were based on a more moderate view than were the more draconian assumptions proffered by most industry stakeholders.

## ASSUMPTIONS

- Key market segments sensitized by estimated attritions
  - 1. Family - Japan -35%, Korea -40%, Taiwan -35%
  - 2. School trips Japan, Korea, and Taiwan -100%
  - 3. Silver (excluding family and school trips) J & T -50%, K -100%
  - 4. OL's age 25-49 (excluding family and school trips) J-K-T -5%
  - 5. All other nationalities and market segments -0%

Note: 1&2 above are the most sensitive to visitor attritions and comprise more than 75% of 2019 arrivals

- TSA benchmark used for spending and GovGuam revenues
- Economic multiplier applied 1.6 per UOG study (Dr. Ruane)

## ANALYSIS

In order to provide a more accurate account of the economic impacts as it relates to Visitor arrivals, GVB established baseline metrics directly from the Tourism Satellite Account Economic Impact report (TSA report).

The TSA report utilizes methodologies established by the United Nations World Tourism Organization, as ratified by the U.N., Eurostat and the Organization for Economic Co-operation and Development (OECD), which provide a method of measuring the direct, indirect and induced impacts of tourism on Guam.

Based on Guam's 2016 TSA report the following baseline metrics were established:

- Visitor Expenditures per person = \$1,140.00 per trip
- Visitor spending per person contribution into Government Revenue = \$175.28
- Visitor spending to support 1 local job = \$74,000.00
- Based on the Direct, Indirect and Induced impacts of Tourism on Guam a 1.6x multiplier was used to estimate the extent of the industry's impact.

To further quantify the impact of a new Cannabis Industry on Guam's tourism market, GVB, based on source market intelligence from Japan, Korea and Taiwan, first determined the market segments with high sensitivity to cannabis. Based on discussions and feedback from travel trade partners the following segments are expected to be immediately affected:

- Family Market - Those traveling with Children and grandparents
- School Groups - Large student groups from source markets engaged in educational exchanges with GDOE, UOG and GCC.
- Silver Market - Seasoned travelers defined as visitors aged 50+
- Office Ladies - Professional female colleagues travelling in groups

Using Fiscal Year 2019 as a reference point for GVB's analysis, two scenarios were generated to measure any negative impacts to the industry.

1. Pre-Cannabis - Estimates the economic impacts as a direct result of visitor arrivals and expenditures
2. Post Cannabis Implementation - Estimated the economic impacts as a direct result of visitor arrivals and expenditures and sensitized for the previously stated market segments.

The results from the direct comparison of both scenarios were then offset by the economic gains and benefits as stated in the Tourism Economics Independent Economic Impact Study (IEIS) on its first year of implementation basis.

## HIGHLIGHTS

Results from the Pre-Cannabis v. Post Cannabis scenarios yielded the following results

- Total net estimated loss of visitors = -330,057
  - GVB estimated loss of visitors = 361,557 Pax
    - Loss by Market segment:
      - Family - 278,393
      - School Groups - 6,012
      - Silver Market - 30,568
      - Office Ladies - 2,329
  - IEIS visitor gains +31,500
- Total net estimated loss of visitor's expenditures = -\$486,159,668.80
  - GVB estimated loss of visitors = -\$578,759,668.80
    - Loss by Market segment:
      - Family - \$317,368,305.00
      - School Groups -\$6,853,680.00
      - Silver Market - \$34,847,520.00
      - Office Ladies - \$2,655,288.00
      - Government Revenue- \$63,373,754.78
  - IEIS economic gains +\$92,600,000.00
- Total net estimated Jobs lost = 4,154
  - GVB estimated loss of jobs - 4,888
  - IEIS estimated jobs added + 734

## CONCLUSION

1. GVB understands that there are distinct benefits of implementing a new Cannabis Industry on Guam. However, management has ascertained that \$11.5 million in positive economic impact from a cannabis industry is far outweighed by the estimated net loss of \$486.2 million to the island's tourism industry.
2. Case studies underpinning the Independent Economic Impact Study authorized in P. L. 35-5 were largely of western consumer orientation, specifically the U. S. mainland, and deemed to be of marginal relevance to the island's east Asian core markets. The differences in consumer views, behaviors, and most importantly public policy, are materially significant considerations.

## GVB ECONOMIC ANALYSIS OF THE CANNABIS INDUSTRY ON GUAM'S TOURISM

Economic Comparison Analysis (Cannabis Industry Impact)											
Pre Cannabis Implementation (FY2019)						Post Cannabis Implementation (FY2019)					Impact (+/-)
Arrivals	Japan	Korea	Taiwan	Others	TOTAL	Japan	Korea	Taiwan	Others	TOTAL	
Family (vacation)	248,813	458,725	9,426	22,598	739,562	161,728	275,235	6,127	18,078	461,169	(278,393)
School Trips	4,882	917	213	983	6,995	0	0	0	983	983	(6,012)
Silver Market	15,803	7,383	787	29,780	53,753	7,902	0	394	14,890	23,185	(30,568)
Office Ladies	15,713	15,079	1,033	14,759	46,584	14,927	14,325	981	14,021	44,255	(2,329)
Total Arrivals	285,211	482,104	11,459	68,120	846,894	169,630	275,235	6,520	33,951	485,337	(361,557)
<b>Est. Visitor Expenditures</b>											
	Japan	Korea	Taiwan	Others	TOTAL	Japan	Korea	Taiwan	Others	TOTAL	
Family (vacation)	\$ 283,646,820.00	\$ 522,946,500.00	\$ 10,745,640.00	\$ 25,761,720.00	\$ 843,100,680.00	\$ 184,370,433.00	\$ 313,767,900.00	\$ 6,984,666.00	\$ 20,609,376.00	\$ 525,732,375.00	(\$317,368,305.00)
School Trips	\$ 5,565,480.00	\$ 1,045,380.00	\$ 242,820.00	\$ 1,120,620.00	\$ 7,974,300.00	\$ -	\$ -	\$ -	\$ 1,120,620.00	\$ 1,120,620.00	(\$6,853,680.00)
Silver Market	\$ 18,015,420.00	\$ 8,416,620.00	\$ 897,180.00	\$ 33,949,200.00	\$ 61,278,420.00	\$ 9,007,710.00	\$ -	\$ 448,590.00	\$ 16,974,600.00	\$ 26,430,900.00	(\$34,847,520.00)
Office Ladies	\$ 17,912,820.00	\$ 17,190,060.00	\$ 1,177,620.00	\$ 16,825,260.00	\$ 53,105,760.00	\$ 17,017,179.00	\$ 16,330,557.00	\$ 1,118,739.00	\$ 15,983,997.00	\$ 50,450,472.00	(\$2,655,288.00)
Total Visitor Spend	\$ 325,140,540.00	\$ 549,598,560.00	\$ 13,063,260.00	\$ 77,656,800.00	\$ 965,459,160.00	\$ 210,395,322.00	\$ 330,098,457.00	\$ 8,551,995.00	\$ 54,688,593.00	\$ 603,734,367.00	(\$361,724,793.00)
Total Gov't Revenue	\$ 49,991,784.08	\$ 84,503,189.12	\$ 2,008,533.52	\$ 11,940,073.60	\$ 148,443,580.32	\$ 29,732,737.64	\$ 48,243,190.80	\$ 1,142,895.71	\$ 5,951,001.39	\$ 85,069,825.54	(\$63,373,754.78)
Est. Jobs Supported	4,394	7,427	177	1,049	13,047	2,843	4,461	116	739	8,159	(4,888)
Multiplier x 1.6											
<b>Total Economic Impact</b>	\$ 520,224,864.00	\$ 879,357,696.00	\$ 20,901,216.00	\$ 124,250,880.00	\$ 1,544,734,656.00	\$ 336,632,515.20	\$ 528,157,531.20	\$ 13,683,192.00	\$ 87,501,748.80	\$ 965,974,987.20	\$ (578,759,668.80)

**Assumptions:**

- Cannabis impact loss per segment assumes the following:
  - Family market (Japan, Taiwan at -35%; Korea at -40%; and Others at -20%)
  - School Trips market (Japan, Korea, Taiwan at -100%; Others unaffected)
  - Silver market: excludes family and school trips (Japan, Taiwan at -50%; Korea at -100%)
  - Office ladies market: ages 25-49; excluding family and school trips (Japan, Korea, Taiwan at -5%)
- Visitors Spend estimated at \$1,140 per pax; source: TSA 2016
- Government Revenue estimated at \$175.28 per pax; source: TSA 2016
- Jobs Supported estimated at \$74,000 visitor spend supporting 1 local job
- Total economic impact uses a multiplier of 1.6x

CCB IEIS Assessment (1st Year Basis)			
	Visitor	Resident	Total
Total New Visitor Arrivals	31500	0	31,500
Total Est pax Engagement	66500	14500	81,000
Total Expenditure	\$ 1,300,000.00	\$ 10,200,000.00	\$ 11,500,000.00
Est. Jobs Supported	206	528	734
Est. Total Tax Revenue	\$ 2,400,000.00	\$ 8,400,000.00	\$ 10,800,000.00
Total Estimated Economic Impact			\$ 92,600,000.00

Total Est. Economic Impact adjusted for CCB IEIS

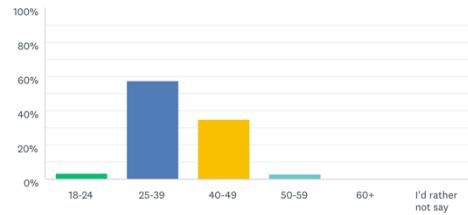
**\$ (486,159,668.80)**

## GVB- CANNABIS TRAVEL PLANNING SURVEY

To gain further insights into consumer sentiments regarding the legalization of Cannabis in an international destination, GVB sampled 785 Korean consumers. The following results are taken directly from potential visitors to Guam. Based on this sample size and a 95% confidence level, a margin of error of  $\pm 3.43\%$  has been computed for the following results.

### What Age range do you fall under?

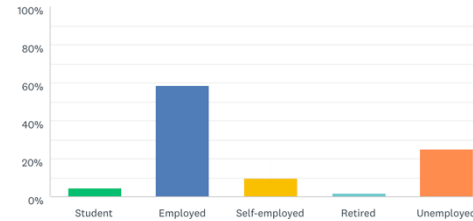
Answered: 785 Skipped: 0



ANSWER CHOICES	RESPONSES	
▼ 18-24	3.44%	27
▼ 25-39	57.71%	453
▼ 40-49	34.90%	274
▼ 50-59	3.06%	24
▼ 60+	0.64%	5
▼ I'd rather not say	0.25%	2
<b>TOTAL</b>		<b>785</b>

### Current employment status:

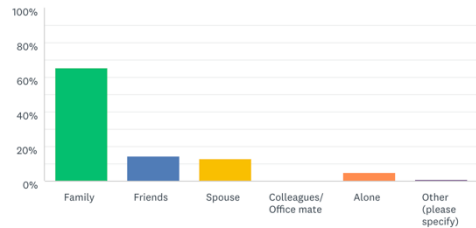
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ANSWER CHOICES	RESPONSES	
▼ Student	4.84%	38
▼ Employed	58.73%	461
▼ Self-employed	9.68%	76
▼ Retired	1.78%	14
▼ Unemployed	24.97%	196
<b>TOTAL</b>		<b>785</b>

### When traveling to an international destination, who do you usually travel with?

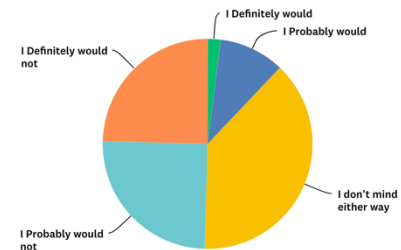
Answered: 785 Skipped: 0



ANSWER CHOICES	RESPONSES	
▼ Family	65.73%	516
▼ Friends	14.39%	113
▼ Spouse	13.25%	104
▼ Colleagues/Office mate	0.38%	3
▼ Alone	5.10%	40
▼ Other (please specify)	Responses 1.15%	9
<b>TOTAL</b>		<b>785</b>

### Would you travel to a destination that has legalized Cannabis for recreational use?

Answered: 785 Skipped: 0



ANSWER CHOICES	RESPONSES	
▼ I Definitely would	2.04%	16
▼ I Probably would	10.06%	79
▼ I don't mind either way	38.34%	301
▼ I Probably would not	24.97%	196
▼ I Definitely would not	24.59%	193
<b>TOTAL</b>		<b>785</b>