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MARIJUANA ECONOMIC & FISCAL BENEFITS ANALYSIS: NEVADA

PREPARED FOR:

 **NEVADA**
DISPENSARY ASSOCIATION

OCTOBER 2018

Prepared By:

 **RCG**economics

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October 16, 2018

Ms. Riana Durrett, Esq.
Executive Director
Nevada Dispensary Association
521 S. 7th St.
Las Vegas, NV 89101

Re: *Marijuana Economic & Fiscal Benefits Analysis: Nevada ("the Study")*

Dear Ms. Durrett:

RCG Economics LLC ("RCG") is pleased to submit the referenced Study to the Nevada Dispensary Association ("NDA" or "the Client") relative to updating RCG's *Nevada Adult-Use Marijuana Economic & Fiscal Benefits Analysis*, July 2016 report. The purpose of the Study is to analyze the potential economic and fiscal benefits of the marijuana industry ("the Industry") on the Nevada economy.

The Study represents an analysis of the estimated and hypothetical economic benefits, and a portion of the potential public fiscal benefits, associated with the Industry. These benefits include, but are not limited to, increases in output (gross sales/spending), employment and wages/labor income, as well as sales and use taxes resulting from industry activities in the market.

Our analysis of the Industry's direct benefits on the state's economy is based upon survey results provided by Nevada firms that participate in the state's Industry as well as data provided by various state and local government agencies pertaining to the potential benefits noted above. Estimates of indirect and induced benefits were prepared by RCG employing the widely used and widely accepted IMPLAN (Impact Analysis for PLANing) economic benefits model. Our general fiscal analysis is also based on the above survey results in addition to Nevada Revised Statutes and municipal tax information and formulas.

The Study is intended for the sole use of the NDA and it may be distributed to the press, to various interest groups and to governmental representatives. Publication of the Study or any information contained therein, in any manner, must explicitly indicate that it was prepared by RCG.

Standard Assumptions

This work scope was performed according to the "*Standard Assumptions & Limiting Conditions*" detailed in an attachment to this letter.

Independence

We do not warrant the results or outcomes of our research on engagements, and our fees are not contingent on the findings. As such, RCG is an independent advisory firm.

Use & Nature of Report & Methodologies

The distribution of the Study is limited to the NDA. If the NDA intends to reproduce and distribute the Study, it must be reproduced in its entirety. If it intends to include the Study in a document used for the offering of securities, the NDA agrees: (1) to provide RCG with a representation letter; (2) that legal counsel will have advised it before the offering is made; (3) that the offering document complies with all applicable local jurisdictions and regional agencies, State of Nevada and federal legal requirements; and (4) that no reference will be made to our name in any promotional or offering materials without first furnishing us a draft of the materials and then obtaining our written consent.

The results of RCG's services under this engagement are the property of RCG. Copies of all documents including writings and computer or machine-readable data, which describe or relate to the services performed pursuant to this consulting assignment, or the results thereof, are the property of RCG and will be provided upon request. However, the NDA will not provide RCG's Inventions and Works to any third party or use the same for the benefit of any third party, except with the prior written consent of RCG.

The Study is in the form of a narrative-report, along with any appropriate tables, graphs and maps. RCG is not responsible for statements or interpretations made by the NDA relating to the Study.

All ideas, developments, computer models, methodologies, innovations, inventions and copyrightable work (hereinafter "Inventions and Works"), which RCG conceived and were used during the period of the Study, and which either (a) are within the scope of RCG's businesses or investigations, or (b) are supported by the use of materials, facilities or information paid for or provided by RCG are the exclusive property of RCG. In this regard, the NDA agrees to credit RCG for its work.

Scope of Work

A. Survey

In cooperation with the Client, RCG designed and NDA management distributed a high-level survey to the members of the NDA electronically. RCG analyzed the survey results for the purpose of comparing its 2016 report findings to the latest actual dispensary operations data, specifically regarding tax collections, gross sales, wages and benefits and employment. We understand that the NDA represents 90 percent of dispensaries in Southern Nevada and 80 percent of dispensaries statewide. Thus, it potentially has a broad enough sample size to apply to the universe of dispensaries in the state.

B. Economic Benefits Analysis ("EBA")

RCG estimated and updated three levels of economic benefits: direct, indirect and induced, comparing those estimates with all available actual data. Whereas the concept of a direct benefit is relatively straightforward, the concepts of indirect and induced benefits are powerful but often misunderstood tools in economic analysis. Fundamentally, they are based on an extension of the direct expenditures by a business' operations and employment. Each type of benefit is briefly described below:

1. **Direct benefits** include the revenue benefits generated by the Industry's ongoing operations (annual benefit), including output, employment and compensation (including fringe benefits and tip income) paid to those employed as a direct result of the existence of the Industry.
2. **Indirect benefits** are the wholesale purchases of goods and services resulting from the initial direct spending generated by the Industry. For example, spending by the Industry (a direct benefit) will cause Nevada businesses serving it to purchase products and services from their suppliers. The portion of these purchases made within Nevada is counted as an "indirect" economic benefit. Accordingly, inter-industry purchases associated with the facility are calculated as annual indirect benefits in this analysis.

3. **Induced benefits** are the output, employment and labor compensation growth generated by the Industry's employees as they consume goods and services within the state's economy. Their Nevada spending will cycle through the state's economy and will be exchanged for goods and services provided by Nevada businesses, thus "inducing" additional new spending (retail, groceries, gas, etc.) and employment in Nevada.

C. Fiscal Benefits Analysis ("FBA")

As part of this proposal, RCG, as noted above, prepared an updated FBA. In addition to the Study's actual state-level excise taxes, some of the other taxes that were considered as part of our FBA, if measurable, included retail sales and use tax and modified business tax (payroll). The required data came from the Nevada Department of Taxation and a survey of members of the NDA.

Like RCG's EBA, our FBA does NOT estimate whether the Study potentially generates a "net" fiscal impact to state and local governments associated with the Industry. Specifically, we did not estimate the public service or other costs associated with the Industry (e.g., public safety, health and human services, schools, parks, transportation).

If you have any questions, please do not hesitate to contact us at your convenience by phone at 702-967-3188 ext. 401 or by email at jrestrepo@rcg1.com.

Regards,



RCG Economics LLC

Attachment

Attachment: Standard Assumptions & Limiting Conditions

1. RCG prepared, from third-party information collected by RCG, as well as our internal economic and fiscal models, databases and sources, the Study.
2. The Client is responsible for representations about their plans and expectations and for disclosure of significant information that might affect the ultimate realization of the analyses results.
3. The results of RCG's analyses apply only to the effective date of our Study. The success of the Client's plans will be affected by many related and unrelated economic conditions within a local, regional, national and/or world context. We assume no liability for an unforeseen change in the local, regional or national economies. Accordingly, we have no responsibility to update our report for events and circumstances occurring after the date of our Study.
4. Our Study is based on historical economic, dispensary operations and fiscal benchmark information. Thus, variations in the future could be material and have an impact on our Study conclusions. Even if our Study's hypothetical assumptions were to occur, there will usually be differences between the estimated and actual results, because events and circumstances frequently do not occur as expected, and those differences may be material. These could include major changes in economic and market conditions; and/or terms or availability of financing altogether; and/or major revisions in current state and/or federal tax or regulatory laws.
5. If our Study is reproduced by the Client, it must be reproduced in its entirety.
6. RCG makes no representation or warranty as to the accuracy or completeness of the third-party information contained in our Study, and shall have no liability for any representations (expressed or implied) contained in, or for any omissions from, our materials.
7. The working papers for this consulting assignment will be retained in RCG's files and will be made available for your reference. We are available to support the analyses, as required.
8. Unless otherwise stated in our report, no effort was made to determine the possible effect, if any, of future Federal, State or local legislation, including any environmental or ecological matters or interpretations thereof.
9. We did not perform an audit, review or examination or any other attest function (as defined by the AICPA) regarding any of the third-party historical market, Industry and economic benchmarks or demographic information used or included in the report; therefore, RCG does not express any opinion or any other form of assurance with regard to the same, in the context of our Study.

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I. EXECUTIVE SUMMARY

RCG Economics LLC (“RCG”) was retained by the Nevada Dispensary Association (“NDA”) to prepare an economic & fiscal benefits study (“the Study”). The purpose of the Study is to analyze the potential economic and fiscal benefits on the Nevada economy from the legalized marijuana industry (“the Industry”), especially in relation to the start of adult-use, or recreational, sales in July 2017. Additionally, when possible, we relate these findings to those found in *Nevada Adult-Use Marijuana Economic & Fiscal Benefits Analysis* (“the Original Study”) performed in July 2016 in relation to the Initiative to Regulate and Tax Marijuana that passed as a statewide ballot initiative in November 2016. The seven-year “study period” is 2018 – 2024 to facilitate comparisons of the two studies. The results of the Study are based in large part on the results of a survey (“the Survey”) prepared by RCG.

The Study is comprised of two complementary analyses:

- Economic Benefit Analysis (“EBA”)
- Fiscal Benefit Analysis (“FBA”)

The EBA estimates direct, indirect and induced economic benefits associated with the Industry. These benefits include, but are not limited to, increases in output (gross sales/spending), employment and wages/labor income resulting from Nevada marijuana sales.

Our analysis of the Industry’s direct benefits on the Nevada economy is largely based on information provided by firms participating in the marijuana market by means of the Survey that RCG prepared as well as data provided by various state and local government agencies. RCG prepared estimates of indirect and induced benefits by employing the widely used and widely accepted IMPLAN (Impact Analysis for PLANning) economic benefits model. Our general fiscal analysis is also based on the results of the Survey as well as Nevada Revised Statutes and municipal tax information and formulas.

Our FBA is based on the following sources of tax revenue related to the Industry for the seven-year period (“study period”) from 2018 – 2024:

- Retail sales and use tax revenue from the sale of marijuana.
- Excise tax revenues from the wholesale of marijuana.
- Excise tax revenues from the retail sale of marijuana.
- State Commerce Tax revenue generated by retailers, manufacturers and cultivators with gross revenues in excess of \$4,000,000 for the tax year.

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- # Modified Business Tax (“MBT”) revenues by retailer, manufacturers, and cultivators with gross wages in excess of \$50,000 for the tax quarter.
- # Business license fees paid by retailers (not including cultivators or manufacturers). We also did not include one-time application fees.

Table I-1 summarizes the results of both the EBA and FBA. It shows \$8 billion in cumulative benefits (in 2018 inflation-adjusted dollars), including \$4.9 billion in industry sales during the period. This spending is expected to create about 67,000 jobs, measured in person-years, and \$3.6 billion in associated wages. Based on these output and wages, the industry is projected to produce approximately \$1 billion in tax revenues for the state and local governments between 2018 and 2024. The 2018 numbers are based on data released by the Nevada Department of Taxation. Estimates beyond 2018 are projections.

A person-year is a measure of jobs over time. For example, one full-time, or full-time equivalent (“FTE”)¹, job that is held over a one-year period is equal to one person-year of employment, whereas one job held over a seven-year period would make up seven person-years in employment. The sum of annual jobs in this report represents jobs in person-years, while individual years are in FTE. Therefore, to get average annual full-time jobs over the study period, one could divide the total number of jobs in person-years over seven years by seven.

Table I-1: Annual Nevada Marijuana Industry EBA & FBA-Summary of Results, 2018 – 2024

Year	Total Sales	Total Output	Total Jobs	Total Wages	Tax Revenue
2018	607,710,000	989,654,000	8,300	443,338,000	113,083,000
2019	683,367,000	1,112,862,000	9,300	498,532,000	144,816,000
2020	710,590,000	1,157,194,000	9,700	518,391,000	150,585,000
2021	720,978,000	1,174,110,000	9,800	525,969,000	152,786,000
2022	730,539,000	1,189,680,000	10,000	532,944,000	154,814,000
2023	739,659,000	1,204,533,000	10,100	539,597,000	156,747,000
2024	748,644,000	1,219,165,000	10,200	546,153,000	158,651,000
Total	4,941,487,000	8,047,198,000	67,400*	3,604,924,000	1,031,482,000

**Note: Sum of Total Jobs are measured in person-years while each year’s jobs are measured in FTE.*

Sources: RCG Economics, IMPLAN, Department of Taxation. Numbers may not calculate exactly due to rounding.

¹ A full-time equivalent job is the number of total full- and part-time jobs measured as full-time jobs. For example, one full-time job and one part-time 20-hour-per-week job make up 1.5 full-time equivalent jobs.

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ECONOMIC BENEFITS SUMMARY

Summary of the Total Benefits of the Regulated Marijuana Industry: 2018 – 2024

RCG found that the forecasted spending of \$4.9 billion has potentially sizable effects on the Nevada economy. The benefits are broken into two parts: total seven-year study period and the year 2024. “Total economic benefits” are the sum of direct, indirect and induced benefits.

These total results apply to only the first seven years of the existence of the regulated market. The single year (2024) is meant to show what the Industry should look like after reaching maturity.

The results of our EBA are as follows. The EBA is detailed in Chapter III.

To summarize the total results:

- ✦ An estimated \$8.0 billion of total output activity is projected to be generated for the Nevada economy during the first seven years of adult-use marijuana regulation.
- ✦ The Industry is forecasted to support approximately 67,500 person-years of jobs in Nevada during the study period.
- ✦ Marijuana regulation is expected to generate approximately \$3.6 billion in direct, indirect and induced labor income during the study period.

Table I-2 illustrates the cumulative economic benefits of marijuana regulation in Nevada from the associated direct, indirect and induced spending.

Table I-2: Total Nevada Marijuana Industry Economic Benefits, 2018 – 2024

Impact Type	Spending/Output	Employment* (Person-Years)	Labor Income
Direct Benefit	\$4,941,486,000	47,900	\$2,611,560,000
Indirect Benefit	\$976,677,000	6,600	\$325,634,000
Induced Benefit	\$2,129,035,000	13,000	\$667,731,000
Total Benefits	\$8,047,198,000	67,500	\$3,604,925,000
Multipliers	1.63	1.41	1.38

**Note: Employment is measured in person-years.*

Sources: RCG Economics, IMPLAN. Numbers may not calculate exactly due to rounding.

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Direct spending also helps create additional spending. The total benefits are described using “multipliers”. For example, “direct spending/output” would potentially result in a multiplier of 1.63 in the state economy during the seven-year study period. This means that for every dollar spent on retail marijuana, an additional \$0.63 would ripple through the Nevada economy. These multipliers measure the total increase in output/economic activity, total employment and labor income in the wider regional economy per dollar in output/spending, per new jobs created and per dollar increase in earnings.

Summary of Total Initiative Economic Benefits: 2024

The total annual economic benefits, based on 2024 benefits, are the sum of the annual averages of direct, indirect and induced benefits (see Table I-3).

- ✦ By 2024, an estimated \$1.2 billion of total output activity is projected to be generated for the Nevada economy each year due to marijuana regulation.
- ✦ By 2024, the Industry is forecasted to support about 10,200 FTE jobs in Nevada per year.
- ✦ By 2024, the Industry is expected to generate approximately \$546.2 million in direct, indirect and induced labor income each year.

Table I-3: Total Nevada Marijuana Industry Economic Benefits, 2024

Impact Type	Spending/Output	Employment	Labor Income
Direct Benefit	\$748,644,000	7,300	\$395,656,000
Indirect Benefit	\$147,968,000	1,000	\$49,334,000
Induced Benefit	\$322,553,000	2,000	\$101,162,000
Total Benefits	\$1,219,165,000	10,200	\$546,153,000
Multipliers	1.63	1.41	1.38

Sources: RCG Economics, IMPLAN. Numbers may not calculate exactly due to rounding.

Summary of Total Initiative Economic Benefits: 2018

The total annual economic benefits, based on 2018 benefits, are the sum of the annual averages of direct, indirect and induced benefits (see Table I-4).

- ✦ In 2018, an estimated \$989.7 million of total output activity is estimated to be generated for the Nevada economy due to marijuana regulation. This represents \$607.7 million in industry sales.

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- ✦ In 2018, the Industry is expected to support about 8,300 FTE jobs in Nevada.
- ✦ In 2018, the Industry is estimated to generate approximately \$443.3 million in direct, indirect and induced labor income.

Table I-4: Total Nevada Marijuana Industry Economic Benefits, 2018

Impact Type	Spending/Output	Employment	Labor Income
Direct Benefit	\$607,710,000	5,900	\$321,173,000
Indirect Benefit	\$120,113,000	800	\$40,047,000
Induced Benefit	\$261,831,000	1,600	\$82,118,000
Total Benefits	\$989,654,000	8,300	\$443,338,000
Multipliers	1.63	1.41	1.38

Sources: RCG Economics, IMPLAN. Numbers may not calculate exactly due to rounding.

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FISCAL BENEFITS SUMMARY

The following sources of tax revenue related to the Industry for the study period from 2018 – 2024 were analyzed:

- ✦ Retail sales and use tax revenue from the sale of marijuana.
- ✦ Excise tax revenues from the wholesale of marijuana.
- ✦ Excise tax revenues from the retail sale of marijuana.
- ✦ State Commerce Tax revenue generated by retailers, manufacturers and cultivators with gross revenues in excess of \$4,000,000 for the tax year.
- ✦ Modified Business Tax (“MBT”) revenues by retailer, manufacturers, and cultivators with gross wages in excess of \$50,000 for the tax quarter.
- ✦ Business license fees paid by retailers (not including cultivators or manufacturers). We also did not include one-time application fees.

The results of our FBA are as follows. The FBA is detailed in Chapter IV.

RCG found that the Industry could potentially produce in excess of one billion dollars in fiscal benefits to the State and its local jurisdictions over the study period (see Table I-5). The sales and use tax accounts for the largest piece of the revenue pie with \$349.4 million. The retail excise tax is projected to contribute another \$336.2 million with the wholesale excise tax adding \$212.3 million. County and municipal license fees could add another \$112.0 million, while the MBT and commerce tax will add \$19.1 million and \$2.5 million, respectively.

Table I-5: Total Nevada Marijuana Industry Fiscal Benefits, by Tax, 2018 – 2024

Tax	Revenue
Estimated Total Sales and Use Tax Revenue	\$349,434,000
Estimated Wholesale Excise Tax Revenue	\$212,260,000
Estimated Retail Excise Tax Revenue	\$336,232,000
Total Nevada Commerce Tax Revenue	\$2,511,000
Total Nevada Modified Business Taxes	\$19,073,000
License Fee Revenue	\$111,973,000
Total Fiscal Benefits	\$1,031,483,000

Sources: RCG Economics, Department of Taxation

The over \$1 billion in revenues during the seven-year period is also broken up by year (see Table I-6). In 2018, that revenue estimate totals \$113.1 million. By 2024, tax revenue generated by the marijuana industry is estimated to increase to \$158.7 million dollars per year.

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Table I-6: Annual Nevada Marijuana Industry Fiscal Benefits, 2018 – 2024

Year	Fiscal Benefits
2018	\$113,083,000
2019	\$144,816,000
2020	\$150,585,000
2021	\$152,786,000
2022	\$154,814,000
2023	\$156,747,000
2024	\$158,651,000
Total Fiscal Benefits	\$1,031,482,000

Sources: RCG Economics, Department of Taxation

II. MARIJUANA INDUSTRY & SURVEY

Legalized sales of adult-use marijuana began in July 2017, coinciding with the start of the 2018 fiscal year (“FY”). The purpose of this economic and fiscal benefits analysis (“the Study”) is to quantify the benefits associated with the marijuana industry (“the Industry”) from FY2018 through FY2024 (“the study period”), now that it has been in operation for nearly a year. This also allows for a certain amount of comparison to the 2016 study *Nevada Adult-Use Marijuana Economic & Fiscal Benefits Analysis* (“the Original Study”) prepared for The Coalition to Regulate Marijuana Like Alcohol in July 2016 by RCG Economics (“RCG”) and the Marijuana Policy Group. To accomplish this, RCG collected data from various secondary sources, as well as conducting a survey of member-firms (“the Survey”) of the Nevada Dispensary Association (“NDA”). The NDA is the marijuana industry’s state-wide trade association. In this section we briefly discuss the state of the Industry after one year of operation as well as the Survey.

A. THE INDUSTRY

The Nevada Department of Taxation (“Taxation”) supplied data on active marijuana licenses in the state, as reported by local jurisdictions as of December 2017 (see Table II-1). As one would expect, the table shows that Clark County has the greatest number of licenses by far, accounting for 74 percent of the state’s current supply, which is in line with its share of the state population. Washoe County holds about 15 percent of the state’s licenses, also on par with its 15 percent of state population. The remaining 11 percent of licenses were shared among Nye County, Churchill County and Carson City. There is now one location in Elko County that was not in operation at that time the data from Taxation was disseminated.

The table also shows the breakdown of licenses by type. The greatest number of licenses have been awarded to cultivation facilities throughout the state, making up about 39 percent of the total. Production facilities account for the second greatest share at 27 percent of licenses. Dispensaries represent only 20 percent of licensees. Much of the reason for this is that municipalities have attempted to control the number of dispensaries in an effort to limit their conspicuousness in communities. Cultivation and production facilities, on the other hand, are easier to obscure as they tend to be located in industrial parks with less obvious signage.

B. MARIJUANA INDUSTRY SURVEY

As part of the Study, RCG conducted the Survey to better measure the benefits of the Industry to the State. The Survey was disseminated via an online instrument and was conducted between April and May 2018. The terms of our contract with the NDA limit our ability to share the detailed data gathered. This was done to protect the

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identities of the firms that participated; however, below we do discuss certain selected summary statistics regarding the Survey. Additionally, RCG can furnish a blank copy of the Survey questions upon request.

Forty business entities participated in the Survey. They accounted for 60 of Nevada's 309 marijuana licenses (19 percent of total). These firms were made up of cultivation, manufacturing/production, distribution and retail facilities. The survey did not include any laboratory facilities. By license type, 33 percent of licenses were for marijuana cultivation, 25 percent for production, 12 percent for distribution and 30 percent for dispensaries. These figures suggest a slight skew toward cultivators and away from dispensaries.

These firms reported 1,319 total workers at the end of December 2017. They also reported total revenues of \$182.5 million in calendar year 2018. This equated to an average of \$5.1 million per firm for the calendar year for firms reporting revenue. Based on results presented in the next section, the survey-taking firms account for approximately 22 percent of total jobs within the Industry and 30 percent of its total output. These figures suggest that the survey-taking firms produce slightly more than their fair-share of the Industry's output.

Among the firms surveyed, RCG also found that adult-use, or recreational use, made up 63 percent of reported sales, with medicinal sales accounting for the remaining 37 percent.

RCG found that many firms in the Industry did not hire their own workers. This was done to better comply with federal laws, which still prohibit the use of marijuana. Based on the Survey, we found that 32 percent of firms relied, at least in part, on employment agencies and other outside firms to employ their workers.

Regardless of who employed workers, RCG asked respondents whether they had plans to use more workers in the next fiscal year. Seventy-six percent of firms reported that they were, indeed, planning on hiring additional workers, compared to 24 percent that had no plans to do so. This suggests at strong growth in the Industry over the next FY.

Also as part of the survey, RCG asked firms to provide a breakdown of their expenses. There were enough responses to provide a partial set of results, which are based on the survey and the results of the analysis discussed in the following section (see Table II-2). Figures are in 2018 dollars.

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Table II-1: Active Nevada Marijuana Licenses, by Location and Type: Dec-17

Location	Cultivation	Laboratory	Production	Distributor	Dispensary	Total
Carson City	4	0	3	4	2	13
Carson City	4	0	3	4	2	13
Churchill	0	0	0	0	1	1
Fallon	0	0	0	0	1	1
Clark	88	8	64	23	47	230
Henderson	3	0	2	0	5	10
Las Vegas	46	8	31	15	35	135
Laughlin	1	0	1	0	1	3
Mesquite	1	0	1	1	1	4
North Las Vegas	37	0	29	7	4	77
Spring Valley	0	0	0	0	1	1
Nye	11	0	5	3	1	20
Amargosa Valley	1	0	1	0	0	2
Beatty	1	0	1	0	0	2
Pahrump	9	0	3	3	1	16
Washoe	17	2	11	4	11	45
Incline Village	0	0	0	0	1	1
Reno	9	0	5	2	4	20
Sparks	6	2	5	2	4	19
Sun Valley	0	0	0	0	2	2
Verdi	1	0	1	0	0	2
Washoe Valley	1	0	0	0	0	1
Total	120	10	83	34	62	309

Source: Department of Taxation

Table II-2: Nevada Marijuana Industry Expense Breakdown, by Selected Type: 2018 – 2024

Business Expense Type	Total Costs	Annual Costs
Facility Rent/Lease Costs (if lease):	\$206,167,000	\$29,452,000
Payroll / Personnel Expenses	\$796,220,000	\$113,746,000
Marketing & Advertising Expenses	\$123,207,000	\$17,601,000
Electric Utility Expenses	\$100,324,000	\$14,332,000
Attorneys' Fees Expenses	\$80,061,000	\$11,437,000
Capital Outlay Expenses*	\$486,334,000	\$69,476,000
Total of Selected Expense Types**	\$1,792,313,000	\$256,045,000
Total Expenses	\$3,195,586,000	\$456,512,000

*Note: Capital outlays based on first year of legalized sales and, thus, may overestimate future outlays.

**Note: Totals may not sum exactly due to rounding.

Sources: RCG Economics, IMPLAN

III. ECONOMIC BENEFITS ANALYSIS (“EBA”)

A. OVERVIEW

The following pages summarize RCG’s findings and conclusions regarding the potential economic benefits associated with the Industry to the State of Nevada between 2018 and 2024. Adult-use marijuana sales began July 2017 at the start of FY2018.

The Study attempts to quantify these economic benefits to the state, based on the creation of jobs, as well as the generation of wages and economic activity (output/spending).

B. STATEMENT OF METHODOLOGY

RCG estimated three types of economic benefits to the State of Nevada: direct, indirect and induced. The concept of a direct benefit is relatively straightforward. However, concepts of indirect and induced benefits, while critically important in assessing the totality of benefits associated with new economic activities, are often misunderstood in economic analysis. Fundamentally, these secondary and tertiary benefits are based on an extension of the direct expenditures/spending associated with adult-use marijuana purchases. Each type of benefit is briefly summarized below.

- **Direct benefits** are due to the retail purchases of marijuana; the jobs created to support the retail stores; and the labor income (employee compensation, proprietor income and benefits paid) – essentially the direct benefits associated with marijuana regulation.
- **Indirect benefits** are the local purchases of goods and services resulting from the initial direct spending caused by marijuana retail spending. For example, the retail dispensaries’ spending on marijuana cultivation, office supplies, rent, utilities, food manufacturing and the like will cause suppliers to replenish inventories, etc. These sales are counted as an indirect economic benefit.
- **Induced benefits** are the output, employment and labor income growth generated by the employees of marijuana retailers and their local suppliers as they consume goods and services in the Nevada economy. Put another way, induced benefits are benefits from labor income spent by direct and indirect employees. For example, a new employee to the area works as a salesperson at one of the marijuana retailers. The portion of his or her personal income will be spent locally, will cycle through the region, and will be

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exchanged among local merchants; thus, inducing additional new spending (retail, food, gas, etc.) and employment in the region.

Estimates of the direct, indirect and induced benefits to output and employment benefits as well as direct labor income benefits, are based on results from the widely accepted IMPLAN (IMPact Analysis for PLANning) economic input-output model. The IMPLAN model has been in use since 1979. The model accounts closely follow the accounting conventions used in the “Input-Output Study of the U.S. Economy” by the U.S. Bureau of Economic Analysis. The results show the benefit of the Industry on overall economic activity and employment. This EBA was prepared under various limiting assumptions acknowledged and presented herein:

- **Substitution Effects:** This analysis does not factor in any changes to purchases of other goods and services on which marijuana expenditures might alternatively have been spent. Without factoring in consumers’ substitutions between goods and services, the EBA measures economic benefits of the Industry to the Nevada economy.
- **Supply/Demand Pooling:** For all direct retail sales, Nevada requires that Industry demands be accommodated in-state. However, for indirect demand, such as for cultivators, we have assumed that demands will be accommodated in-state to the greatest extent possible. Thus, all needs that can possibly be met by in-state producers/suppliers will be met by these producers/suppliers. If demand is greater than supply, local producers/suppliers will meet as much of that demand as possible and the remaining demand will be met from outside the region. Since this minimizes imports, it would maximize local economic activity and the resulting multipliers.
- **Economic Leakage:** RCG’s analysis also recognizes as important, “leakage” from the study region (Nevada) due to spending on purchases outside of the region. Economic leakage refers to revenues that flow out of a local or regional economy to finance the purchase of goods and services from outside sources (imports) instead of being purchased locally. In a highly developed and urbanized economy, like Los Angeles, for example, a large share of the goods and services consumed are purchased from local producers and suppliers.

In this Study, all estimates (except employment) are in inflation-adjusted 2018 dollars.

Three categories are estimated for each type of benefit. They include:

- Changes to output/spending (equivalent to Gross Product)

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- Changes to employment (measured in terms of annual full-time equivalents, or “FTEs” for annual jobs or person-years for the full 2018-2024 study period totals, which are equal to average FTEs multiplied by the seven years in the analysis)
- Changes to labor income (employee compensation, proprietor income and benefits paid)

C. DETAILED EBA RESULTS

The most straightforward way to understand the Industry in Nevada is by referencing taxable sales. This last point of sale at a dispensary includes costs that have accumulated all the way through the supply chain, from the initial cultivation of the plant to testing of the product, to production and manufacturing of marijuana-derived products, to their distribution and finally to the sale to consumers.

RCG used this process as the basis for its methodology. The marijuana cultivation industry as it pertains to Nevada is described as “Marijuana, grown under cover” by the North American Industry Classification System (“NAICS”). Both IMPLAN and the State of Nevada use NAICS codes to classify industries as well, which makes it relatively straightforward to analyze an industry. RCG followed the method IMPLAN prescribes for this type of vertically-structured analysis, which it calls “marginizing.” This method breaks an industry up into each part of its supply chain, as described above, and examines the economic benefits associated with each step.

RCG intervened in the model to ensure that the steps would reflect the reality of the Nevada marijuana market. This required RCG to change the retail output to the correct industry, based on the state’s NAICS for marijuana dispensaries. We also set the local purchasing percentage to 100 percent for all industries within the chain, as required of the industry by state law.

Results of this EBA update are based largely on state data from Taxation as well as the Survey. Taxation is reporting statewide taxable marijuana sales at the retail level that effectively include all sales at dispensaries on a monthly basis. There were ten months of data available at the time of this writing. Therefore, RCG extrapolated the last two months of the fiscal year’s (“FY”) sales, based on a six-month rolling/moving average. This will likely result in a conservative estimate of actual FY-end sales.

RCG also produced estimates for seven years in order to match the seven-year study period in the Original Study. This helped make the current results more comparable to the Original Study. We also used the same growth assumptions as in the Original Study. This means that RCG assumed a 70 percent capture of the black market in the first year, growing to 90, then 95 percent in following year. There is some speculation that these capture rates are overestimated based on the first year of sales. If the legalized market’s capture rate was actually lower than 70

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percent in the first year, this assumption would underestimate future growth. However, we prefer to err on the side of conservatism in this case and, therefore, accept these growth rates.

After the market reaches saturation at 95 percent, it is expected to grow with the rate of population growth, plus tourist growth plus any shift in preferences. However, we assumed no shift in preferences for the term of this study.

Table III-1 shows the benefits of the Industry to Nevada for FY 2018 – 2024. Table III-2 illustrates the effects of the Industry to Nevada for 2024 only. That year’s economic benefits should be a fairly good indicator of the annual benefit of legal marijuana sales because it shows what the Industry should look like after sales have stabilized. In general, the results of the Original Study were designed to be conservative. That appears to be borne out by these results, based on the first year of data. Table III-3 illustrates the economic effects of the Industry on Nevada for 2018 only.

One note to include is that the output/spending figures include Sales & Use tax, as well as excise taxes collected, as per IMPLAN¹. The Sales & Use tax has been in use in Nevada for a long time and so was included in the Industry’s spending/output as prescribed. However, the new excise tax is somewhat unique in that it only applies to the cultivation industry in this one case—marijuana—and; therefore, is as yet unlikely to be captured by the IMPLAN model. For this reason, we did not include the excise tax in the industry spending prior to the analysis to avoid overestimating the marijuana market’s effects on the economy. We added the excise tax revenues to the direct and total output only after the analysis.

Summary of the Total Benefits of the Regulated Marijuana Industry: 2018 – 2024

DIRECT BENEFITS

- ✦ An estimated \$4.9 billion of direct output/spending activity is projected to be generated in the Nevada economy during the first seven years of marijuana regulation (see Figure III-1).
- ✦ RCG forecasted that marijuana regulation will potentially support about 47,900 person-years of direct jobs in Nevada. This estimate does not factor in indirect and induced jobs.
- ✦ Marijuana regulation is estimated to generate approximately \$2.6 billion in direct labor earnings (payroll) during the seven-year study period.

¹ Retail Margin: The markup to the price of a product when a product is sold through a retail trade activity. It is calculated as sales receipts less the cost of goods sold. Sales and excise taxes collected by the retailer are generally shown as a part of the retail margin (From IMPLAN glossary).

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A person-year is a measure of jobs over time. For example, one full-time, or full-time equivalent (“FTE”)², job that is held over a one-year period is equal to one person-year of employment, whereas one job held over a seven-year period would make up seven person-years in employment. The sum of annual jobs in this report represents jobs in person-years, while individual years are in FTE. Therefore, to get average annual full-time jobs over the study period, one could divide the total number of jobs in person-years over seven years by seven.

INDIRECT AND INDUCED BENEFITS

- A projected \$3.1 billion of indirect and induced output activity is forecasted in the Nevada economy from the first seven years of marijuana regulation.
- The Industry is projected to support 19,600 person-years of indirect and induced jobs in Nevada.
- The Industry is estimated to generate approximately \$993.4 million in indirect and induced labor income during the seven-year study period.

TOTAL BENEFITS

“Total economic benefits” are the sum of direct, indirect and induced benefits.

- An estimated \$8.0 billion of total output activity is projected to be generated for the Nevada economy during the first seven years of adult-use marijuana regulation.
- The Industry is forecasted to support about 67,500 person-years in jobs in Nevada in the seven-year study period.
- Marijuana regulation is estimated to generate approximately \$3.6 billion in direct, indirect and induced labor income during the seven-year study period.

Summary of the Total Benefits of the Regulated Marijuana Industry: 2024

DIRECT BENEFITS

- By 2024, an estimated \$748.6 million of direct output activity is projected to be generated in the Nevada economy every year due to adult-use marijuana regulation (see Figure III-2).

² A full-time equivalent job is the number of total full- and part-time jobs measured as full-time jobs. For example, one full-time job and one part-time 20-hour-per-week job make up 1.5 full-time equivalent jobs.

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- ✦ RCG forecasted that by 2024, the industry will potentially support approximately 7,300 direct FTE jobs in Nevada per year. This estimate does not factor in indirect and induced jobs.
- ✦ By 2024, the Industry is expected to generate approximately \$395.7 million in direct labor income per year.

INDIRECT AND INDUCED BENEFITS

- ✦ By 2024, a projected \$470.5 million of indirect and induced output activity is forecasted to be generated in the Nevada economy each year.
- ✦ By 2024, the Industry is forecasted to support 3,000 indirect and induced FTE jobs in Nevada every year.
- ✦ By 2024, the Industry is estimated to generate approximately \$150.5 million in indirect and induced labor income per year.

TOTAL BENEFITS

“Total economic benefits” are the sum of direct, indirect and induced benefits.

- ✦ By 2024, an estimated \$1.2 billion of total output activity is projected to be generated for the Nevada economy each year due to marijuana regulation.
- ✦ By 2024, the Industry is forecasted to support about 10,200 FTE jobs in Nevada per year.
- ✦ By 2024, the Industry is estimated to generate approximately \$546.2 million in direct, indirect and induced labor income each year.

Summary of the Total Benefits of the Regulated Marijuana Industry: 2018

DIRECT BENEFITS

- ✦ In 2018, an estimated \$607.7 million of direct output activity is estimated to be generated in the Nevada economy due to marijuana regulation (see Figure III-3).
- ✦ RCG calculated that the industry will potentially support approximately 5,900 direct FTE jobs in Nevada in 2018. This estimate does not factor in indirect and induced jobs.
- ✦ In 2018, the Industry is expected to generate approximately \$321.2 million in direct labor income.

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INDIRECT AND INDUCED BENEFITS

- In 2018, an estimated \$381.9 million of indirect and induced output activity is expected to be generated in the Nevada economy.
- In 2018, the Industry is expected to support 2,400 indirect and induced FTE jobs in Nevada.
- In 2018, the Industry is estimated to generate approximately \$122.2 million in indirect and induced labor income.

TOTAL BENEFITS

“Total economic benefits” are the sum of direct, indirect and induced benefits.

- In 2018, an estimated \$989.7 million of total output activity is estimated to be generated for the Nevada economy due to marijuana regulation.
- In 2018, the Industry is expected to support about 8,300 FTE jobs in Nevada.
- In 2018, the Industry is estimated to generate approximately \$443.3 million in direct, indirect and induced labor income.

There is a caveat in the employment results. There are two reasons RCG did not report income per worker. It is inappropriate to calculate income per worker as the ratio of total income benefits-to-total employment benefits. First, IMPLAN calculates total jobs: full- and part-time. Because the results were largely based on the IMPLAN social accounting matrix, these results reflect the same nature of full- and part-time job mixing. Due to the method and tools that IMPLAN provides for the FTE (or person-year) job conversion, the apparent job-to-income ratio is not meaningful.

Using a straight calculation for average labor income in 2024 yields a result of approximately \$53,500 per worker per year. However, every FTE is counted as one job per year by definition rather than total jobs per year as originally calculated, which is approximately 1.1 jobs per FTE job. Therefore, using the FTE (or person-year) employment figure results in an overestimate of average income per job. The second reason is that labor income includes proprietor income and, therefore, does not reflect only employee compensation.

For example, imagine a retailer were to create two jobs – one 30-hour per week job and one 10-hour per week job. If the 30-hour per week worker is paid \$40,000 annually, while the 10-hour per week worker is paid \$10,000, annually, that would equate to an average of \$25,000 per year over the two jobs. However, as an FTE, it would

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equate to one job at \$50,000 per year. This would incorrectly double the combined average annual wage for these two employees from \$25,000 to \$50,000.

Multipliers

Table III-4 illustrates the output, employment and labor income multipliers associated with the Industry. Multipliers are based on the “ripple effect” of economic change. They translate the benefits of a change in the direct variable on the other variables. In other words, multipliers generally estimate the “waves” of economic activities’ or events’ direct output/spending, employment and labor income. The multipliers in the table show the ratio of total benefits to direct benefits, based on the results of the IMPLAN model. For example, this table shows that for every dollar “directly” spent on retail marijuana, an additional \$0.63 of output/spending is generated (sum of indirect and induced benefits) in the Nevada economy.

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Table III-1: Total Nevada Marijuana Industry Economic Benefits, 2018 – 2024

Impact Type	Spending/Output	Employment* (Person-Years)	Labor Income
Direct Benefit	\$4,941,486,000	47,900	\$2,611,560,000
Indirect Benefit	\$976,677,000	6,600	\$325,634,000
Induced Benefit	\$2,129,035,000	13,000	\$667,731,000
Total Benefits	\$8,047,198,000	67,500	\$3,604,925,000
Multipliers	1.63	1.41	1.38

*Note: Employment over study period is measured in person-years.

Sources: RCG Economics, IMPLAN. Numbers may not calculate exactly due to rounding.

Table III-2: Total Nevada Marijuana Industry Economic Benefits, 2024

Impact Type	Spending/Output	Employment	Labor Income
Direct Benefit	\$748,644,000	7,300	\$395,656,000
Indirect Benefit	\$147,968,000	1,000	\$49,334,000
Induced Benefit	\$322,553,000	2,000	\$101,162,000
Total Benefits	\$1,219,165,000	10,200	\$546,153,000
Multipliers	1.63	1.41	1.38

Sources: RCG Economics, IMPLAN. Numbers may not calculate exactly due to rounding.

Table III-3: Total Nevada Marijuana Industry Economic Benefits, 2018

Impact Type	Spending/Output	Employment	Labor Income
Direct Benefit	\$607,710,000	5,900	\$321,173,000
Indirect Benefit	\$120,113,000	800	\$40,047,000
Induced Benefit	\$261,831,000	1,600	\$82,118,000
Total Benefits	\$989,654,000	8,300	\$443,338,000
Multipliers	1.63	1.41	1.38

Sources: RCG Economics, IMPLAN. Numbers may not calculate exactly due to rounding.

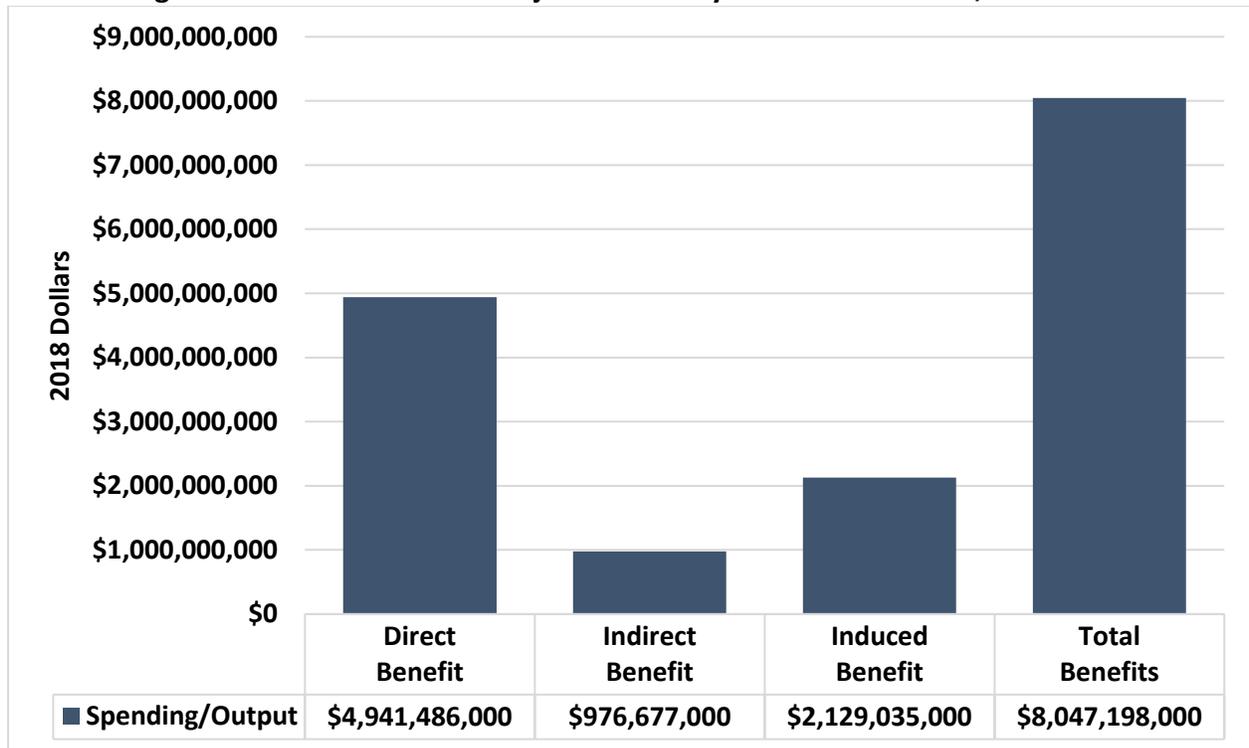
Table III-4: Nevada Marijuana Industry Economic Multipliers, 2018 – 2024

Impact Type	Spending/Output	Employment	Labor Income
Multiplier	1.63	1.41	1.38

Sources: RCG Economics, IMPLAN

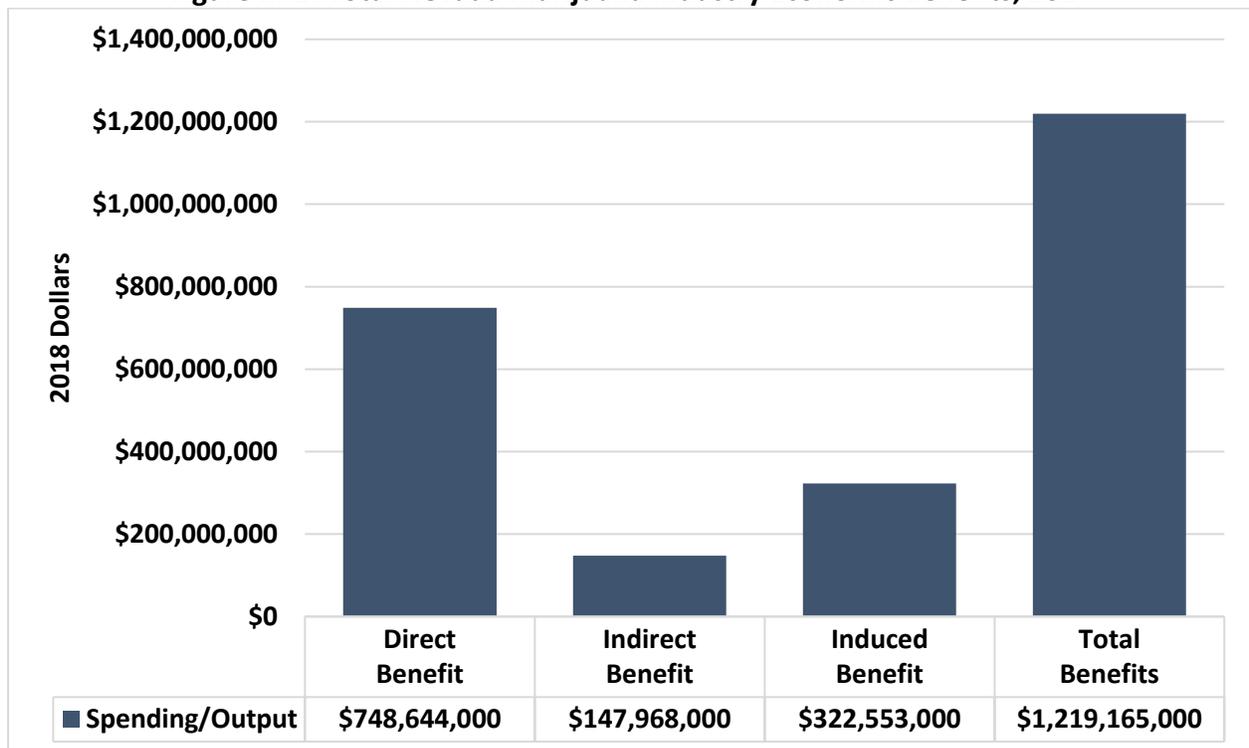
MARIJUANA ECONOMIC & FISCAL BENEFITS ANALYSIS: NEVADA

Figure III-1: Total Nevada Marijuana Industry Economic Benefits, 2018-2024



Sources: RCG Economics, IMPLAN

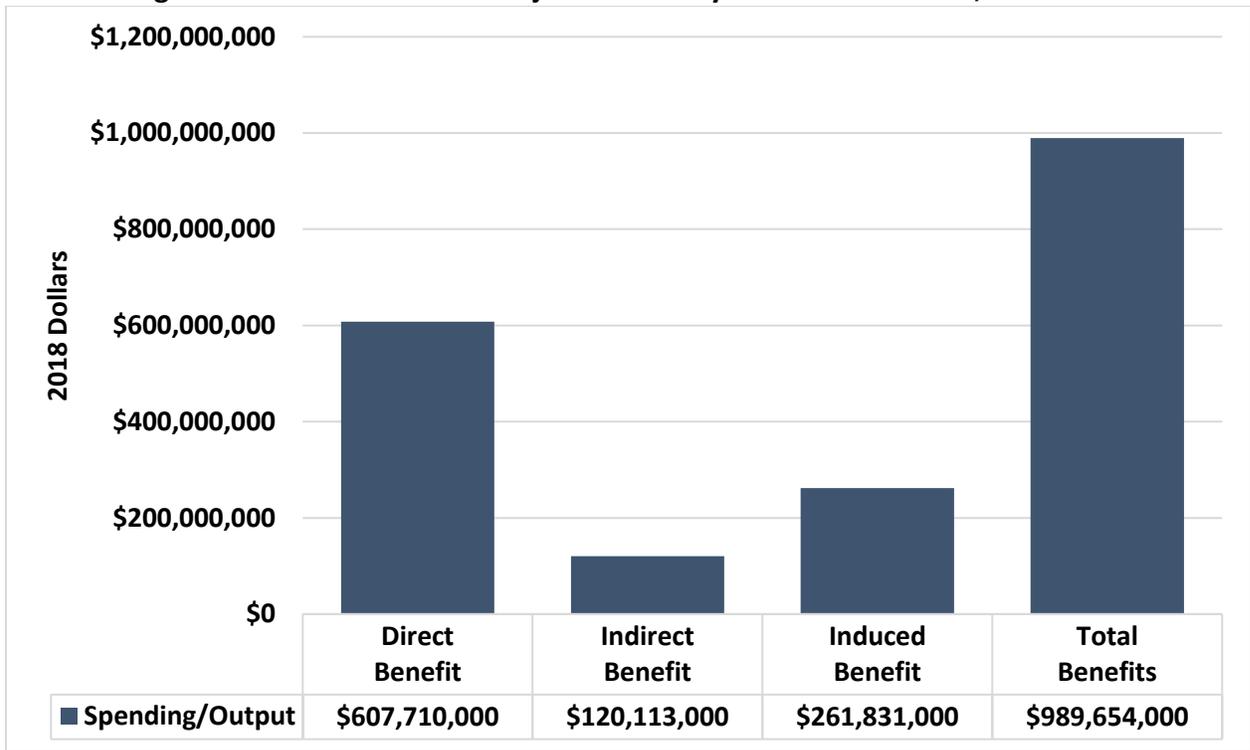
Figure III-2: Total Nevada Marijuana Industry Economic Benefits, 2024



Sources: RCG Economics, IMPLAN

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Figure III-3: Total Nevada Marijuana Industry Economic Benefits, 2018



Sources: RCG Economics, IMPLAN

IV. FISCAL BENEFITS ANALYSIS (“FBA”)

A. OVERVIEW

The Industry is producing economic activity in Nevada, which will fiscally benefit state and local governments. This FBA presents estimates of tax revenues potentially generated by the Industry for the seven-year period from 2018 – 2024 (see Table IV-1). Table IV-2 shows total tax revenues by year. The FBA does not estimate the public service or other costs associated with the Industry (e.g., public safety, health and human services, schools, parks, transportation and utilities).

These tax revenues discussed in this section will be produced via the following streams:

- ✦ Retail sales and use tax revenue from the sale of marijuana.
- ✦ Excise tax revenues from the wholesale of marijuana.
- ✦ Excise tax revenues from the retail sale of marijuana.
- ✦ State Commerce Tax revenue generated by retailers, manufacturers and cultivators with gross revenues in excess of \$4,000,000 for the tax year.
- ✦ Modified Business Tax (“MBT”) revenues by retailer, manufacturers, and cultivators with gross wages in excess of \$50,000 for the tax quarter.
- ✦ Business license fees paid by retailers (not including cultivators or manufacturers). We also did not include one-time application fees.

RCG found that the Industry could potentially produce in excess of one billion dollars in fiscal benefits to the State and its local jurisdictions over the study period. This figure is not directly comparable to the findings of RCG’s Original Study because today’s tax structure has changed relative to two years ago. The retail excise tax had not yet been suggested prior to the completion of the Original Study. Additionally, local sales and use tax rates have risen in the last two years, increasing sales and use revenues as well. The licensing fee structure has been overhauled as well. Finally, the Commerce Tax and the MBT tax collections are also higher now because the structure of the marijuana market is different than assumed in the Original Study. That study assumed a competitive market within each sector of the marijuana industry. However, with local jurisdictions limiting the number of dispensaries, revenues and employment costs will be higher than originally anticipated on a per-store basis because each location will have a greater market share than expected. In turn, each location will more easily break the MBT and Commerce Taxes’ floor thresholds.

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B. RETAIL SALES AND USE TAX ESTIMATE

In Nevada, retail sales are subject to a combined minimum tax rate of 6.85 percent plus various county option taxes. Not all counties have chosen to enact a county option sales and use tax. The revenues generated from the combined minimum tax go to the State General Fund, school funds and city/county relief funds. This FBA does not estimate the total amount of tax revenue redistributed back to each county. The sales and use tax analysis herein is focused on revenue generated by the components of the minimum tax rate and the aggregated county option taxes (see Table IV-3).

RCG calculated the sales and use tax benefits based on the taxable retail sales reported by Taxation and projected by RCG as described above. Based on these annual sales, we applied a share to each county based on its share of marijuana licenses in the state. RCG then applied each county's tax rate to its sales to calculate the revenue produced in each county by retail marijuana sales. This method weights the sales and use revenues by each county's tax rates.

The total estimated retail sales and use tax revenues generated in Nevada by the Industry is projected at \$349.4 million during the study period. Of that total, the estimated county option sales and use tax revenue generated by Nevada's counties is \$57.9 million (see Table IV-4).

Additionally, Table IV-5 presents annual sales and use tax revenues. RCG estimated revenues of \$43 million generated by the marijuana industry in 2018, increasing to \$52.9 in 2024.

C. WHOLESALE & RETAIL EXCISE TAX ESTIMATE

A 15 percent excise tax is applied to the sale of marijuana by cultivation facilities in the State. The tax is projected to generate \$212.3 million over the seven-year period. An additional 10 percent excise tax is applied to the sale of marijuana by a dispensary in the State. The tax for this excise tax is projected to generate \$336.2 million during the study period. Altogether, the two excise taxes are projected to generate a total of \$548.5 million dollars over seven years (see Table IV-6).

These figures are based on Taxation statistics over the first 10 months of FY2018. As with the Industry's taxable retail sales, the final two months of the year were based on a rolling average. The subsequent years' values were calculated based on the same growth rates as used for taxable retail sales as well.

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D. COMMERCE TAX ESTIMATE

In Nevada, a tax is required to be paid by a business entity engaging in business in the State. The so-called Commerce Tax is applied to the “amount obtained by subtracting \$4 million from the Nevada gross revenue of the business entity for the taxable year and multiplying that amount by the rate set forth in NRS 363C.310 to 363C.550, inclusive, for the business category in which the business entity is primarily engaged” (NRS 363C.300). Under NRS 363C.097 “the business entity shall be deemed to be primarily engaged in the business category in which the highest percentage of its Nevada gross revenue is generated.”

RCG’s Commerce Tax analysis is focused on the revenue generated by marijuana businesses that are retailers, manufacturers, distributors and cultivators or a mix of these four types of marijuana businesses. The Survey shows that because many of these firms are vertically integrated, the industry that is applicable is the retail industry, which carries the highest tax rate among these industry types. RCG used results from the Survey we conducted to calculate these results. The Commerce Tax is calculated by fiscal year, which spans July to June in Nevada. Therefore, the first set of Commerce Tax data, which were for FY2017 (July 2016 – June 2017), do not include recreational marijuana sales, which began the next day. We conservatively doubled each firm’s reported revenues from the Survey to increase this low figure, then applied the appropriate Commerce Tax rate based on the firm’s NAICS classification. Based on this result, RCG calculated a weighted effective tax rate of 0.059 percent. Again, this is a conservative estimate because we expect that the weighted effective tax rate to increase significantly once recreational sales are included. However, the Commerce Tax is by far the smallest overall tax relative to the Industry, producing less than one percent of expected tax revenues over the study period—a total of about \$2.5 million (see Table IV-7). Thus, this conservative estimate will have a negligible effect on the total revenue estimate.

E. MODIFIED BUSINESS TAX ESTIMATE

In Nevada, the MBT is required to be paid by a business entity engaging in business in the State. The MBT is imposed “on each employer at the rate of 1.475 percent of the amount by which the sum of all the wages, as defined in NRS 612.190, paid by the employer during a calendar quarter with respect to employment in connection with the business activities of the employer exceeds \$50,000” (NRS 363B.110.1). Businesses are entitled to subtract modified business tax due by an amount equal to 50 percent of the Commerce Tax paid in the preceding year, and the deduction may only be applied for any of the four calendar quarters following the end of the preceding for which the Commerce Tax was paid (NRS 363B.110.4).

In the marijuana industry, as discussed above, RCG discovered that many firms do not directly employ their own employees. In an effort to deal with federal law, many firms rely on outside employment agencies to “employ” their workers. The marijuana firms, in turn, compensate those agencies for their employment services. However,

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regardless of who technically pays workers, the workers are employed by some entity in the state and their labor is subject to the MBT at some point. Therefore, it is not material to these calculations whether marijuana-selling firms pay employees directly. If we have an estimate for total compensation, we can come up with a reasonable estimate for the MBT.

As with the Commerce Tax, RCG obtained information on MBT tax payments by Industry firms. Based on the Survey, we found that firms are paying an effective tax rate of approximately 1.29 percent on their payrolls. We expected this number to be smaller than the 1.475 percent rate in the law due to the \$50,000 threshold per quarter. RCG applied this effective rate to the direct labor income estimates produced in the EBA (less proprietor income), then deducted 50 percent of the expected Commerce Tax revenues. Our analysis has shown that total MBT revenue for the Industry will potentially total \$19.0 million over the study period (see Table IV-8).

F. BUSINESS LICENSING FEES

There are two types of licensing fees that the marijuana industry pays at the local level: application fees and licensing fees. The application fees are one-time fees that municipalities require to set up a marijuana business. The licensing fees are generally a recurring fee that allow these firms to continue operating within local jurisdictions. In this Study, we focus on the latter type. The application fees are relatively small, and as one-time fees, do not accumulate over time. The licensing fees; however, should be substantial.

The State allows municipal governments to tax marijuana firms at up to three percent of their total sales. Local governments, in the meantime, have developed ordinances to take advantage of this ability. From our research, RCG found that municipalities are planning on taxing sales on cultivators, manufacturers and retailers, generally at the maximum allowable rate of three percent determined by the State. This three percent tax rate is only entering implementation after roughly a year of the marijuana market's operation. Therefore, RCG assumed no revenues from these fees in FY2018.

RCG estimates that during the seven-year study period, the Industry will generate \$112.0 million in Nevada business licensing fees to various jurisdictions (see Table IV-9).

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Table IV-1: Total Nevada Marijuana Industry Fiscal Benefits, by Tax, 2018 – 2024

Tax	Revenue
Estimated Total Sales and Use Tax Revenue	\$349,434,000
Estimated Wholesale Excise Tax Revenue	\$212,260,000
Estimated Retail Excise Tax Revenue	\$336,232,000
Total Nevada Commerce Tax Revenue	\$2,511,000
Total Nevada Modified Business Taxes	\$19,073,000
License Fee Revenue	\$111,973,000
Total Fiscal Benefits	\$1,031,483,000

Sources: RCG Economics, Department of Taxation. Numbers may not sum exactly due to rounding.

Table IV-2: Annual Nevada Marijuana Industry Fiscal Benefits, by Year, 2018 – 2024

Year	Revenue
2018	\$113,083,000
2019	\$144,816,000
2020	\$150,585,000
2021	\$152,786,000
2022	\$154,814,000
2023	\$156,747,000
2024	\$158,651,000
Total Fiscal Benefits	\$1,031,483,000

Sources: RCG Economics, Department of Taxation. Numbers may not sum exactly due to rounding.

Table IV-3: Applicable Sales & Use Tax Rates, 2018

Description	Tax Rate
Minimum Statewide Tax Rate	
State Sales and Use Tax	2.00%
Local School Support Tax	2.60%
Basic City-County Relief Tax (city governments)	0.50%
Supplemental City-County Relief Tax (city governments)	1.75%
Option Taxes	
County Option Sales Taxes	0.0%-1.415%
Combined Sales & Use Tax	6.85% - 8.265%

Source: NV Department of Taxation.

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Table IV-4: Total Nevada Sales & Use Tax Revenue, by Type, 2018 – 2024

Tax	Sales & Use
State Sales and Use Tax	\$85,116,000
Local School Support Tax	\$110,651,000
Basic City-County Relief Tax	\$21,279,000
Supplemental City-County Relief Tax	\$74,477,000
County Option Sales Taxes	\$57,910,000
Total Sales and Use Tax Revenue – 7 Years	\$349,434,000

Sources: RCG Economics, IMPLAN, NV Department of Taxation. Numbers may not sum exactly due to rounding.

Table IV-5: Annual Nevada Sales & Use Tax Revenue, 2018 – 2024

Year	Sales & Use
2018	\$42,974,000
2019	\$48,324,000
2020	\$50,249,000
2021	\$50,983,000
2022	\$51,660,000
2023	\$52,304,000
2024	\$52,940,000
Total	\$349,434,000

Sources: RCG Economics, IMPLAN, NV Department of Taxation. Numbers may not sum exactly due to rounding.

Table IV-6: Annual Nevada Wholesale & Retail Excise Tax Revenue, 2018 – 2024

FY	Wholesale Excise	Retail Excise	Total Excise
2018	\$26,104,000	\$41,350,000	\$67,454,000
2019	\$29,354,000	\$46,498,000	\$75,852,000
2020	\$30,523,000	\$48,350,000	\$78,873,000
2021	\$30,969,000	\$49,057,000	\$80,026,000
2022	\$31,380,000	\$49,708,000	\$81,088,000
2023	\$31,772,000	\$50,329,000	\$82,101,000
2024	\$32,158,000	\$50,940,000	\$83,098,000
Total	\$212,260,000	\$336,232,000	\$548,492,000

Sources: RCG Economics, NV Department of Taxation. Numbers may not calculate exactly due to rounding.

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Table IV-7: Annual Nevada Commerce Tax Revenue, 2018 – 2024

FY	Industry Spending	Commerce Tax
2018	\$523,386,000	\$309,000
2019	\$588,545,000	\$347,000
2020	\$611,991,000	\$361,000
2021	\$620,937,000	\$366,000
2022	\$629,171,000	\$371,000
2023	\$637,026,000	\$376,000
2024	\$644,765,000	\$380,000
Total	\$4,255,821,000	\$2,511,000

Sources: RCG Economics, NDA. Numbers may not calculate exactly due to rounding.

Table IV-8: Annual Nevada Modified Business Tax Revenue, 2018 – 2024

FY	Employee Compensation	MBT	MBT w/ Deduction
2018	\$215,852,000	\$2,500,000	\$2,346,000
2019	\$242,725,000	\$2,811,000	\$2,637,000
2020	\$252,394,000	\$2,923,000	\$2,742,000
2021	\$256,084,000	\$2,966,000	\$2,783,000
2022	\$259,479,000	\$3,006,000	\$2,820,000
2023	\$262,719,000	\$3,043,000	\$2,855,000
2024	\$265,910,000	\$3,080,000	\$2,890,000
Subtotal	\$1,755,163,000	\$20,329,000	-
Deduction		\$1,256,000	-
Total		\$19,073,000	\$19,073,000

Sources: RCG Economics, NDA. Numbers may not calculate exactly due to rounding.

Table IV-9: Annual Nevada Licensing Fee Revenue, 2018 – 2024

FY	Licensing Fees
2018	\$0
2019	\$17,656,000
2020	\$18,360,000
2021	\$18,628,000
2022	\$18,875,000
2023	\$19,111,000
2024	\$19,343,000
Total	\$111,973,000

Source: RCG Economics. Numbers may not calculate exactly due to rounding.