

THE ECONOMIC IMPACT OF AVOCADO GROWERS IN RIVERSIDE COUNTY

Presented to:

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THE ECONOMIC IMPACT OF AVOCADO GROWERS IN RIVERSIDE COUNTY

EXECUTIVE SUMMARY

INTRODUCTION AND PURPOSE

In August 2020, the California Avocado Commission (hereafter, CAC) retained The Tootelian Company to assist it in conducting a study to assess the economic impact avocado growers have within Riverside County (hereafter, County). The impact includes the increased business activity created by growing and harvesting avocados, the jobs created as a result of this growth in activity throughout the various sectors of the County's economy, the increased income generated by those employed, and the incremental business taxes created.

The specific issues addressed in this study of avocado growers in Riverside County are:

- How much business activity do they create and how could the overall impact be diffused through the various sectors of the County's economy?
- How many jobs do they create on an annual full-time-equivalent basis?
- How much labor income do they create, and how could that income be diffused within the County's economy due to increased household spending?
- How much do they generate in indirect business taxes, and how could those tax dollars be used to help fund County programs to serve residents?

Two models were used in this analysis. A specially designed model was created to estimate expenditure levels by growers within the County. Then, IMPLAN was used to compute the overall economic impacts of avocado growers.

FINDINGS AND CONCLUSIONS

Economic impact analyses were conducted for the total expenditures of avocado growers in Riverside County. *It is important to note that these projections are based on annual expenditures, which means that this impact is what is expected to occur each year that such spending occurs.*

The Output, Employment, Labor Income, and Indirect Business Taxes generated by avocado growers are summarized below. Growers spend more than \$49.8 million annually in Riverside County. This equates to nearly \$136,500 per day.

Grower Impact	Total	Total Per Day
Output	\$82,396,872	\$225,745
Employment	1,022	n.a.
Labor Income	\$33,108,545	\$90,708
Indirect Business Taxes	\$2,096,121	\$5,743

Based on the findings of this study, avocado growers have a significant impact on Riverside County's economy. Overall, growers create:

- Nearly \$82.4 million annually in economic output, the best measure of economic activity, each year. This equates to nearly \$225,750 each day of the year.
- Nearly 1,025 jobs on a full-time equivalent basis as a result of their business activities and the multiplier effect created by the fact that their purchases create jobs in a variety of farming and non-farming economic sectors.
- More than \$33.1 million annually in labor income as a result of their business activities, or more than \$90,700 every day of the year. These are dollars going to wages and salaries for new employment as well as expanded incomes to those already in the labor force (e.g., overtime pay). These dollars are diffused throughout Riverside County's economy as the funds are spent for a wide array of goods and services.
- Nearly \$2.1 million annually in indirect business taxes, or nearly \$5,750 per day, not including income taxes. Depending on how these funds are used, they can help pay for portions of various Riverside County programs that further benefit the people residing in its communities.

Overall, these findings demonstrate the important role avocado growers play in strengthening the economic climate of Riverside County. They generate significant amounts of economic activity, create a substantial number of jobs on a full-time-equivalent basis, create large amounts of labor income that can be spent by households, and generate considerable indirect business taxes that can help fund County programs. Avocado grower activities create benefits that are diffused throughout Riverside County's economy, touching nearly every aspect of life in the County.

THE ECONOMIC IMPACT OF AVOCADO GROWERS IN RIVERSIDE COUNTY

SUMMARY REPORT OF FINDINGS

INTRODUCTION AND PURPOSE

In August 2020, the California Avocado Commission (hereafter, CAC) retained The Tootelian Company to assist it in conducting a study to assess the economic impact avocado growers have within Riverside County (hereafter, County). The impact includes the increased business activity created by growing and harvesting avocados, the jobs created as a result of this growth in activity throughout the various sectors of the County's economy, the increased income generated by those employed, and the incremental business taxes created.

Issues of the Study

The specific issues addressed in this study of avocado growers in Riverside County are:

- How much business activity do they create and how could the overall impact be diffused through the various sectors of the County's economy?
- How many jobs do they create on an annual full-time-equivalent basis?
- How much labor income do they create, and how could that income be diffused within the County's economy due to increased household spending?
- How much do they generate in indirect business taxes, and how could those tax dollars be used to help fund County programs to serve residents?

The Tootelian Company

The Tootelian Company is a Sacramento, California-based marketing and management consulting firm. It specializes in performing economic impact and cost-benefit studies, conducting market research, and assisting its clients with their business and marketing plans. The consultant was Dennis H. Tootelian, Ph.D. Dr. Tootelian is an Emeritus Professor of Marketing and former Director of the Center for Small Business in the College of Business Administration at California State University, Sacramento. He received his Ph.D. in Marketing from Arizona State University, with minor fields in Accounting and Management.

Dr. Tootelian has conducted numerous economic impact studies on a wide variety of subjects, but mostly for various agricultural crops. Other such studies include ones for the Chicago 2016 Olympic Games Committee, McDonald's Corporation, and other trade and professional associations.

Dr. Tootelian also has published approximately one hundred articles dealing with all facets of business, and has co-authored six texts on marketing and small business management. His academic research has appeared as peer-reviewed articles (i.e., reviewed by academicians for quality of research methodology) in such journals as the Journal of Marketing, Journal of Retailing, Journal of Business Research, Journal of Food Products Marketing, Journal of Health Care Marketing, and Journal of Professional Services Marketing. Results of some of his applied research and writing have appeared in The Congressional Record, The Wall Street Journal, Forbes, The Kiplinger Report, USA Today, ABC National News website, and even The National Enquirer.

In addition to conducting economic impact studies in the agricultural sector, Dr. Tootelian has worked in a consulting capacity with Fortune 500 companies (e.g., McDonald's Corporation, Merck, Johnson & Johnson, Nestles U.S.A., McKesson Corporation), not-for-profit organizations (e.g., California Pharmacists Association, California Dental Association), and federal and County governmental agencies (e.g., California Department of Food and Agriculture, Centers for Disease Control and Prevention, California Environmental Protection Agency, and California Department of Parks and Recreation).

METHODOLOGY

Two models were used in this analysis. A specially designed model was created to estimate expenditure levels by growers within the County. Then, IMPLAN was used to compute the overall economic impacts of avocado growers.

Specialty Feeder Model

Economic impact is a function of expenditures within a defined geographic area. To measure the level of expenditures, the analyst developed a “feeder” economic model that specifically addressed the variables and the critical issues associated with growing avocados in Riverside County. This model not only provided the data used in the IMPLAN analysis, but it illustrated in more detailed ways how the economic impact of growers is diffused throughout the County’s economy.

Because agricultural revenues and expenditures can fluctuate significantly from year-to-year, an “average year” was created based on historical and industrial operating statistics from 2018 to 2020. It is important to note, therefore, that the economic impact of avocado crops could vary on an annual basis depending on grower spending.

The feeder model considered a wide variety of variables. These included expenses related to growing and harvesting avocados on bearing acreage, costs associated with developing non-bearing acreage for future avocado production, costs of moving avocados from the field to consumer markets, etc.

IMPLAN

The model used to compute the economic impact was IMPLAN. It provides modeling based on data and tools to assess economic impacts at the national, state, county, and local levels. IMPLAN is widely used, and some of its clients include federal and state governments, universities, and private sector consultants.

The benefit of using an input-output model like IMPLAN is that it helps evaluate the effects industries have on each other based on the supposition that industries use the outputs of other industries as inputs. An input-output model makes it possible to examine economic relationships between businesses and between businesses and consumers.

Each industry that produces goods and services has an influence on, and in turn is influenced by, the production of goods and services of other industries. These interrelationships are captured through a multiplier effect as the demand and supply trickle over from industry to industry and thus impact total output, employment, employee compensation, and indirect business taxes.

The full range of economic impacts includes direct, indirect, and induced benefits:

- **Direct benefits** consist of economic activity contained exclusively within the agricultural sector. This includes all expenditures made and all people employed.
- **Indirect benefits** define the creation of additional economic activity that results from linked businesses, suppliers of goods and services, and provision of operating inputs.
- **Induced benefits** measure the consumption expenditures of direct and indirect sector employees who spend their incremental income. Examples of induced benefits include employees' expenditures on items such as retail purchases of food and clothing, housing, entertainment, and medical services.

The total direct, indirect, and induced benefits arising due to the multiplier effect are presented in four ways:

- **Output** accounts for total dollar revenues including all sources of income for a given time period. This is the best overall measure of business and economic activity and total economic impact.
- **Employment** demonstrates the number of jobs generated, and is calculated on an annual full-time-equivalent basis.
- **Labor Income** includes all forms of employee compensation paid by employers (e.g., total payroll costs including benefits, wages and salaries of workers), and proprietary income (e.g., self employment income, income received by private business owners).
- **Indirect Business Taxes** consist of property taxes, excise taxes, fees, licenses, and sales taxes paid by businesses. Taxes on profits or income are not included.

The **multiplier effect** for sales and employment reflect the increased economic activity that comes from sales being generated, and expenses being incurred, by growers. For example, when a grower plants, cultivates, and harvests avocados, it must spend money to purchase a variety of goods and other services and hire people through the cultivating and harvesting processes. Purchases made by the grower represent sales to other firms who must then also purchase goods and services and hire people to meet their new demand. The additional hiring to meet demand means more people will have income which they will use to purchase goods and services for their households. All of this brings added sales to firms across most economic sectors in the County. The net effect is that sales dollars are recycled in the County through this process of sales requiring additional purchases and employment, which result in sales for other firms who must use that money to make their own purchases and hire people.

Data Sources

Industry statistics were used to determine average expenses and some other operating data for this study. However, to ensure that this information was appropriate, the CAC was asked to verify that the statistics being used were reasonable for growers. Information from economic impact studies conducted by the analyst for other specialty crop organizations also was used in some instances and verified as appropriate.

Data used to assess the economic impact came from a variety of sources. These include:

- California Avocado Commission.
- California Department of Food and Agriculture’s California Agricultural Statistics Review 2018-2019.
- Census of Agriculture, U.S. Department of Agriculture.
- Census of Business, United States Bureau of the Census.
- Economic Research Unit, Federal Reserve Bank of St. Louis.
- Riverside County’s official website.
- United States Bureau of Labor Statistics.
- University of California, Davis Agriculture and Natural Resources. Publications:
 - Avocado Sample Establishment and Production Costs and Profitability Analysis for San Diego and Riverside Counties, Conventional Production Practices, 2011
 - Avocado Sample Establishment and Production Costs and Profitability Analysis for San Diego and Riverside Counties, Organic Production Practices, 2011
 - Avocado Sample Establishment and Production Costs and Profitability Analysis for Ventura, Santa Barbara and San Luis Obispo Counties, Conventional Production Practices, 2011
 - Avocado Sample Establishment and Production Costs and Profitability Analysis for Ventura, Santa Barbara and San Luis Obispo Counties, Organic Production Practices, 2011
 - Avocado Sample Establishment and Production Costs and Profitability Analysis for San Diego and Riverside Counties, 2001
 - Avocado Sample Establishment and Production Costs and Profitability Analysis for Ventura and Santa Barbara Counties, 2001

FINDINGS OF THE ANALYSES

The findings of this study are presented in two sections: Computation of Expenditures Used in the Analyses, and Economic Impact of Growers. Tabled data is presented at the end of this Summary Report.

Computation of Annual Grower Net Expenditures

Grower expenditures were computed as the average cost per acre multiplied by the number of acres. This was calculated individually for acres in production and acres in development.

Grower Expenditures

The numbers of acres in production and in development in Riverside County were obtained from the CAC. The number of acres in production and in development for the three years of 2017, 2018, and 2019 were averaged and then used in calculating average cost per acre. The average number of acres in production in the County was determined to be 4,166, and the average number of acres in development was 970.

Grower expenditure estimates per acre were computed in two ways. The first was based on average costs per acre as reported in the University of California, Davis (hereafter, UC Davis) studies of avocados in 2001 and 2011. These expenditure levels were for both acres in production and acres in development, including depreciation and amortization. Since the economic impact of growing and harvesting avocados on the State's economy is a function of actual spending, it was not considered appropriate to include depreciation and amortization in these analyses.

The rates of growth in costs per acre for acres in production and acres in development were computed from 2001 through 2011, and those rates were used to estimate grower costs for 2012 through 2020. Then, the cost per acre for acres in production and acres in development were averaged for 2018 through 2020 to estimate the three-year average grower cost per acre.

This analysis using UC Davis reports focused on conventional and not organic production processes. The main reason for this approach was that insufficient data was available to make analyses using organic production costs. However, from the limited data available, it appeared that organic production costs might be somewhat higher than conventional production costs. Therefore, focusing on conventional production processes provided a more conservative estimate of grower costs.

The second method for computing grower costs per acre used the 2011 UC Davis cost estimates and adjusted those costs per acre for acres in production and in development by the Producer Price Index (hereafter, PPI) for avocados. This process provided estimates of grower costs for the years 2012 through 2020. PPI data for avocados was provided by the

U.S. Bureau of Labor Statistics and the Economic Research Unit of the Federal Reserve Bank of St. Louis. Then, the cost per acre for acres in production and acres in development were averaged for 2018 through 2020 to estimate the three-year average grower cost per acre.

The costs per acre derived from the two methods described above were averaged to determine the estimates of grower costs per acre used in this study. It was believed that just using growth rates from the UC Davis studies from 2001 through 2011 might not adequately represent more current trends. Using the PPI provided more current trends, but was not as specific to California. Blending the two results provided a reasonable estimates of grower costs per acre for acres in production and acres in development.

The results of these computations are shown below. These costs were further adjusted downward as described in “Offsets to Grower and Handler Expenses.”

Grower Cost per Acre	Cost/Acre in Production	Cost/Acre in Development
Based on UCD 2001-2011 Growth Rate	\$9,568	\$7,904
Based on PPI @ 2016-2019 Growth Rate	\$17,512	\$15,271
Average of UCD and PPI	\$13,540*	\$11,587*

*These costs were adjusted downward. Please see “Offsets to Grower Expenses” below.

Offsets to Grower Expenditures

Grower costs per acre were adjusted downward to reflect the possible out-migration of some dollars for purchases of goods and services. In effect, it was assumed that not all grower expenditures would be made within the County. This served to make the estimate of economic impact more conservative.

It is also important to note that by eliminating depreciation and amortization costs, this study excludes future investments that growers will be making to replace depreciable assets such as equipment and facilities. Eventually, growers must make capital investments, but the timing of those expenditures is unknown. The net effect of eliminating these costs is to make the analysis considerably more conservative than it might be in terms of estimating the economic impact on Riverside County’s economy.

Grower Expenses Used in the Analyses

Total net expenditures by growers in the County were computed to be \$49,816,276 annually, or \$136,483 per day. This expenditure level for growers was used in IMPLAN to compute the economic impact in Riverside County.

Annual Economic Impact of Growers

Economic impact analyses were conducted based on the total net expenditures of growers in Riverside County. *It is important to note that these projections are based on annual expenditures, which means that this impact is what is expected to occur each year that such spending occurs.*

Growers Annual Economic Impact

The Output, Employment, Labor Income, and Indirect Business Taxes generated by avocado growers are presented in Table One on an annual basis, in Table Two on a daily basis, and summarized below. As previously indicated, avocado growers spend more than \$49.8 million annually in Riverside County. This equates to nearly \$136,500 per day (i.e., \$49.8 million divided by 365 days).

Growers Impact	Total	Total Per Day
Output	\$82,396,872	\$225,745
Employment	1,022	n.a.
Labor Income	\$33,108,545	\$90,708
Indirect Business Taxes	\$2,096,121	\$5,743

The overall Output, or the amount of overall business activity created, is projected to total nearly \$82.4 million annually in the County, equating to nearly \$225,750 each day of the year. This includes the direct spending by avocado growers (“Direct”), the amount of additional business activity created by that spending (“Indirect”), and the amount of additional business activity created by people’s spending as a result of their incremental labor income (“Induced”). Over half of this impact (60.5%) is caused by grower spending, and the remainder (39.5%) is the result of increased business activity.

Nearly 1,025 additional jobs are expected to be created annually in the County as a result of the spending by avocado growers. This is computed on an annual full-time equivalent basis. About 67.2% of this is the result of grower operations and the rest (32.8%) is due to the increased business activity caused by grower spending.

Labor Income resulting from additional people being employed and current employees earning more is projected to be more than \$33.1 million annually, equating to more than \$90,700 each day of the year. About 59.2% of this income is the direct result of spending by avocado growers, while 40.8% is due to the increased business activity. How these funds are likely to be spent across various sectors of the County’s economy is based on consumer purchasing patterns described later in this Summary Report.

Nearly \$2.1 million in additional indirect business taxes is created annually in the County from the increased business activity caused by avocado growers, equating to nearly \$5,750 each day of the year. These are tax dollars generated from businesses benefiting from the heightened economic activity and the increased employment. About 16.7% of these tax dollars is the direct result of spending by growers, while 83.3% is due to the increased

business activity. As is described later in this Summary Report, these tax dollars can be used to fund programs that further serve the communities within the County.

Finally, as a result of grower spending in Riverside County, the industries generating the greatest economic impact, creating the most employment, generating the most labor income, and creating the most indirect business taxes are shown below.

Industry	Output	Industry	Employment
Farming	\$59,015,150	Farming	849.8
Real Estate	\$6,048,910	Professional Services	50.3
Professional Services	\$5,516,594	Retailing & food services	47.4
Retailing & food services	\$3,989,678	Real Estate	25.0
Health	\$2,237,523	Health	19.0

Industry	Labor Income	Industry	Ind. Bus. Taxes
Farming	\$26,083,200	Retailing & food services	\$531,228
Professional Services	\$1,910,714	Farming	\$524,288
Retailing & food services	\$1,497,790	Wholesaling	\$402,972
Health	\$1,241,541	Real Estate	\$400,746
Real Estate	\$735,687	Professional Services	\$209,520

Possible Diffusion of Annual Labor Income Spending

Labor Income created by avocado growers will be diffused throughout the various sectors of Riverside County’s economy. As people spend this added income, those funds will be used to purchase a wide array of goods and services.

To illustrate how those funds could be distributed among various economic sectors in the County, consumer expenditure patterns were obtained from the U.S. Bureau of Labor Statistics. Assuming that those funds will be spent in the same proportion as consumers currently spend their incomes, the dollars generated for selected economic sectors are shown below and in more detail in Table Three.

Selected Spending Category	Annual Expenditures	Expenditures Per Day
Food	\$3,509,377	\$9,615
Food at home	\$1,944,273	\$5,327
Food away from home	\$1,565,104	\$4,288
Housing	\$8,992,950	\$24,638
Shelter	\$5,592,638	\$15,322
Household operations	\$680,377	\$1,864
Housekeeping supplies	\$305,934	\$838
Household furnishings and equipment	\$856,378	\$2,346

	Annual Expenditures	Expenditures Per Day
Selected Spending Category		
Apparel and services	\$786,686	\$2,155
Transportation	\$4,146,049	\$11,359
Vehicle purchases (net outlay)	\$1,650,939	\$4,523
Gasoline, other fuels, and motor oil	\$928,038	\$2,543
Public and other transportation	\$386,256	\$1,058
Healthcare	\$1,926,161	\$5,277
Entertainment	\$1,455,251	\$3,987
Fees and admissions	\$354,757	\$972
Pets, toys, hobbies, and playground equipment	\$362,238	\$992
Personal care products and services	\$333,889	\$915
Education	\$575,643	\$1,577

As shown above, the greatest amount of spending is for housing, transportation, and food. These three account for nearly 50.3% of total spending.

Possible Uses for Annual Business Taxes Created

To demonstrate how the indirect business tax dollars (i.e., excluding income taxes) generated from spending by avocado growers could be used to help fund some of Riverside County’s operations, the County budgets for a variety of departments were obtained from the County’s official website. Some caution should be exercised in using these numbers since budgets are adjusted over the course of the fiscal year. Accordingly, these only are presented as illustrations of general amounts spent by selected Riverside County departments.

Presented below are the percentages of the budgets for selected Riverside County departments which could be funded by the indirect business tax dollars generated by avocado growers’ spending within the County. It is important to recognize that the total business tax dollars generated were applied to each County department budget. A sample of department budgets listed below, and a more extensive list is presented in Table Four.

Departments	Net Cost Recommended Budget for 2020	% of Budget Could Fund*
Agricultural Commissioner	\$6,570,366	31.9%
Department of Child Services	\$42,177,965	5.0%
Emergency Management Department	\$49,988,982	4.2%
Flood Control	\$160,638,239	1.3%
Office on Aging	\$18,872,957	11.1%
Regional Parks & Open Space	\$25,274,775	8.3%

Departments	Net Cost Recommended Budget for 2020	% of Budget Could Fund*
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Sheriff Patrol

\$771,974,659

0.3%

Veterans Services

\$1,889,596

110.9%

*If percent exceeds 100.0%, it indicates the indirect business taxes would pay more than the department budget.

CONCLUSIONS

Economic impact analyses were conducted for the total expenditures of avocado growers in Riverside County. *It is important to note that these projections are based on annual expenditures, which means that this impact is what is expected to occur each year that such spending occurs.*

The Output, Employment, Labor Income, and Indirect Business Taxes generated by avocado growers are summarized below. Growers spend more than \$49.8 million annually in Riverside County. This equates to nearly \$136,500 per day.

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- Nearly 1,025 jobs on a full-time equivalent basis as a result of their business activities and the multiplier effect created by the fact that their purchases create jobs in a variety of farming and non-farming economic sectors.
- More than \$33.1 million annually in labor income as a result of their business activities, or more than \$90,700 every day of the year. These are dollars going to wages and salaries for new employment as well as expanded incomes to those already in the labor force (e.g., overtime pay). These dollars are diffused throughout Riverside County’s economy as the funds are spent for a wide array of goods and services.
- Nearly \$2.1 million annually in indirect business taxes, or nearly \$5,750 per day, not including income taxes. Depending on how these funds are used, they can help pay for portions of various Riverside County programs that further benefit the people residing in its communities.

Overall, these findings demonstrate the important role avocado growers play in strengthening the economic climate of Riverside County. They generate significant amounts of economic activity, create a substantial number of jobs on a full-time-equivalent basis, create large amounts of labor income that can be spent by households, and generate considerable indirect business taxes that can help fund County programs. Avocado grower

activities create benefits that are diffused throughout Riverside County's economy, touching nearly every aspect of life in the County.

TABLE ONE: ANNUAL ECONOMIC IMPACT OF GROWERS

Annual Economic Impact

INDUSTRY	Output Direct	Output Indirect	Output Induced	Output Total
Manufacturing		\$175,459	\$93,905	\$269,365
Wholesaling		\$1,115,767	\$778,374	\$1,894,141
Retailing & Food Services		\$291,225	\$3,698,453	\$3,989,678
Real Estate		\$1,366,374	\$4,682,536	\$6,048,910
Professional Services		\$1,926,268	\$3,590,326	\$5,516,594
Administrative		\$48,953	\$207,374	\$256,327
Education		\$5,219	\$176,944	\$182,163
Health		\$24	\$2,237,500	\$2,237,523
Arts, entertainment, recreation		\$114,592	\$933,511	\$1,048,103
Accommodations		\$3,483	\$13,339	\$16,822
Other		\$387,311	\$243,537	\$630,848
Farming	\$49,816,278	\$9,184,716	\$14,156	\$59,015,150
Federal		\$21,018	\$38,955	\$59,972
State and local		\$618,607	\$612,669	\$1,231,276
Total	\$49,816,278	\$15,259,017	\$17,321,577	\$82,396,872

INDUSTRY	Employment Direct	Employment Indirect	Employment Induced	Employment Total
Manufacturing		0.4	0.3	0.7
Wholesaling		5.2	3.6	8.9
Retailing & Food Services		2.4	45.0	47.4
Real Estate		10.8	14.3	25.0
Professional Services		12.5	37.8	50.3
Administrative		0.4	1.8	2.2
Education		0.1	3.5	3.6
Health		0.0	19.0	19.0
Arts, entertainment, recreation		0.6	4.7	5.3
Accommodations		0.0	0.1	0.2
Other		2.7	3.4	6.1
Farming	687.4	162.3	0.1	849.8
Federal		0.2	0.3	0.5
State and local		1.9	2.0	3.9
Total	687.4	199.5	135.9	1,022.8

INDUSTRY	Labor Income Direct	Labor Income Indirect	Labor Income Induced	Labor Income Total
Manufacturing		\$20,342	\$16,083	\$36,424
Wholesaling		\$301,714	\$210,480	\$512,194
Retailing & Food Services		\$98,361	\$1,399,429	\$1,497,790
Real Estate		\$402,668	\$333,019	\$735,687
Professional Services		\$611,965	\$1,298,748	\$1,910,714
Administrative		\$20,771	\$84,986	\$105,757
Education		\$2,549	\$96,513	\$99,062
Health		\$12	\$1,241,529	\$1,241,541
Arts, entertainment, recreation		\$23,918	\$168,121	\$192,039
Accommodations		\$1,128	\$4,338	\$5,466
Other		\$134,108	\$140,811	\$274,919
Farming	\$19,609,088	\$6,468,653	\$5,459	\$26,083,200
Federal		\$17,269	\$29,478	\$46,747
State and local		\$180,467	\$186,537	\$367,004
Total	\$19,609,088	\$8,283,925	\$5,215,531	\$33,108,545

INDUSTRY	Business Taxes Direct	Business Taxes Indirect	Business Taxes Induced	Indirect Business Taxes Total
Manufacturing		\$3,109	\$2,147	\$5,256
Wholesaling		\$237,376	\$165,596	\$402,972
Retailing & Food Services		\$18,404	\$512,824	\$531,228
Real Estate		\$28,183	\$372,562	\$400,746
Professional Services		\$77,659	\$131,861	\$209,520
Administrative		\$3,171	\$11,831	\$15,002
Education		\$161	\$5,045	\$5,206
Health		\$0	\$28,120	\$28,120
Arts, entertainment, recreation		\$1,478	\$15,054	\$16,532
Accommodations		\$203	\$777	\$980
Other		\$19,939	\$13,338	\$33,278
Farming	\$349,065	\$175,061	\$161	\$524,288
Federal		-\$79	-\$690	-\$769
State and local		-\$38,213	-\$38,025	-\$76,238
Total	\$349,065	\$526,453	\$1,220,602	\$2,096,121

TABLE TWO: AVERAGE DAILY ECONOMIC IMPACT OF GROWERS

Daily Economic Impact

INDUSTRY	Output Direct	Output Indirect	Output Induced	Output Total
Manufacturing		\$481	\$257	\$738
Wholesaling		\$3,057	\$2,133	\$5,189
Retailing & Food Services		\$798	\$10,133	\$10,931
Real Estate		\$3,743	\$12,829	\$16,572
Professional Services		\$5,277	\$9,837	\$15,114
Administrative		\$134	\$568	\$702
Education		\$14	\$485	\$499
Health		\$0	\$6,130	\$6,130
Arts, entertainment, recreation		\$314	\$2,558	\$2,872
Accommodations		\$10	\$37	\$46
Other		\$1,061	\$667	\$1,728
Farming	\$136,483	\$25,164	\$39	\$161,685
Federal		\$58	\$107	\$164
State and local		\$1,695	\$1,679	\$3,373
Total	\$136,483	\$41,806	\$47,456	\$225,745

INDUSTRY	Employment Direct	Employment Indirect	Employment Induced	Employment Total
Manufacturing	n.a.	n.a.	n.a.	n.a.
Wholesaling	n.a.	n.a.	n.a.	n.a.
Retailing & Food Services	n.a.	n.a.	n.a.	n.a.
Real Estate	n.a.	n.a.	n.a.	n.a.
Professional Services	n.a.	n.a.	n.a.	n.a.
Administrative	n.a.	n.a.	n.a.	n.a.
Education	n.a.	n.a.	n.a.	n.a.
Health	n.a.	n.a.	n.a.	n.a.
Arts, entertainment, recreation	n.a.	n.a.	n.a.	n.a.
Accommodations	n.a.	n.a.	n.a.	n.a.
Other	n.a.	n.a.	n.a.	n.a.
Farming	n.a.	n.a.	n.a.	n.a.
Federal	n.a.	n.a.	n.a.	n.a.
State and local	n.a.	n.a.	n.a.	n.a.
Total	n.a.	n.a.	n.a.	n.a.

INDUSTRY	Labor Income Direct	Labor Income Indirect	Labor Income Induced	Labor Income Total
Manufacturing		\$56	\$44	\$100
Wholesaling		\$827	\$577	\$1,403
Retailing & Food Services		\$269	\$3,834	\$4,104
Real Estate		\$1,103	\$912	\$2,016
Professional Services		\$1,677	\$3,558	\$5,235
Administrative		\$57	\$233	\$290
Education		\$7	\$264	\$271
Health		\$0	\$3,401	\$3,401
Arts, entertainment, recreation		\$66	\$461	\$526
Accommodations		\$3	\$12	\$15
Other		\$367	\$386	\$753
Farming	\$53,724	\$17,722	\$15	\$71,461
Federal		\$47	\$81	\$128
State and local		\$494	\$511	\$1,005
Total	\$53,724	\$22,696	\$14,289	\$90,708

INDUSTRY	Business Taxes Direct	Business Taxes Indirect	Business Taxes Induced	Indirect Business Taxes Total
Manufacturing		\$9	\$6	\$14
Wholesaling		\$650	\$454	\$1,104
Retailing & Food Services		\$50	\$1,405	\$1,455
Real Estate		\$77	\$1,021	\$1,098
Professional Services		\$213	\$361	\$574
Administrative		\$9	\$32	\$41
Education		\$0	\$14	\$14
Health		\$0	\$77	\$77
Arts, entertainment, recreation		\$4	\$41	\$45
Accommodations		\$1	\$2	\$3
Other		\$55	\$37	\$91
Farming	\$956	\$480	\$0	\$1,436
Federal		\$0	-\$2	-\$2
State and local		-\$105	-\$104	-\$209
Total	\$956	\$1,442	\$3,344	\$5,743

TABLE THREE: POSSIBLE DIFFUSION OF LABOR INCOME

Labor Income Diffusion as a Result of Grower Expenditures

SPENDING CATEGORY	Annual Expenditures	Expenditures Per Day
Food	\$3,509,377	\$9,615
Food at home	\$1,944,273	\$5,327
Food away from home	\$1,565,104	\$4,288
Housing	\$8,992,950	\$24,638
Shelter	\$5,592,638	\$15,322
Owned dwellings	\$2,816,006	\$7,715
Rented dwellings	\$2,421,875	\$6,635
Utilities, fuels, and public services	\$1,557,229	\$4,266
Household operations	\$680,377	\$1,864
Housekeeping supplies	\$305,934	\$838
Household furnishings and equipment	\$856,378	\$2,346
Apparel and services	\$786,686	\$2,155
Transportation	\$4,146,049	\$11,359
Vehicle purchases (net outlay)	\$1,650,939	\$4,523
Gasoline, other fuels, and motor oil	\$928,038	\$2,543
Other vehicle expenses	\$1,180,423	\$3,234
Public and other transportation	\$386,256	\$1,058
Healthcare	\$1,926,161	\$5,277
Entertainment	\$1,455,251	\$3,987
Fees and admissions	\$354,757	\$972
Audio and visual equipment and services	\$411,061	\$1,126
Pets, toys, hobbies, and playground equipment	\$362,238	\$992
Other entertainment supplies, equipment, services	\$327,195	\$896
Personal care products and services	\$333,889	\$915
Reading	\$44,886	\$123
Education	\$575,643	\$1,577
Cash contributions	\$992,217	\$2,718
Gifts of goods and services	\$470,122	\$1,288

TABLE FOUR: POSSIBLE USES FOR INDIRECT BUSINESS TAXES

Possible Use of Indirect Business Taxes as a Result of Grower Expenditures

Departments	Net Cost Recommended Budget for 2020	% of Budget Could Fund*
Agricultural Commissioner	\$6,570,366	31.9%
Department of Child Services	\$42,177,965	5.0%
Economic Development Agency	\$159,224,984	1.3%
Emergency Management Department	\$49,988,982	4.2%
Fire	\$352,530,980	0.6%
Flood Control	\$160,638,239	1.3%
Information Technology	\$124,497,776	1.7%
Office on Aging	\$18,872,957	11.1%
Public Health	\$86,713,377	2.4%
Regional Parks & Open Space	\$25,274,775	8.3%
Sheriff Patrol	\$771,974,659	0.3%
Veterans Services	\$1,889,596	110.9%

*If percent exceeds 100.0%, it indicates the indirect business taxes would pay more than the department budget.