The Economic Impact of Blueberry Growers in California

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Presented to:

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blueberries
Inspiring Possibilities
U.S. Highbush Blueberry Council

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EXECUTIVE SUMMARY

Introduction and Purpose

In February 2025, the U.S. Highbush Blueberry Council, retained The Tootelian Company to assist it in conducting a study to assess the economic impact blueberry growers (hereafter, growers) have within California (hereafter, State). This impact includes the increased business activity created by growing blueberries, the jobs created as a result of this activity throughout the various sectors of the State's economy, the increased labor income generated for those employed, and the indirect business taxes that are created.

Issues of the Study

The specific issues addressed in this study of blueberry growers in California were:

- How much business activity do growers create and how is the overall impact diffused through the various sectors of the State's economy?
- How many jobs does this business activity create?
- How much labor income is created and how could that income be diffused within the State?
- How much does this business activity generate in indirect business taxes?

Economic impact is a function of spending within a defined geographic area. Accordingly, two models were used in this analysis. A specially designed economic input model was created to help define expenditure levels by growers in an average year. Then, IMPLAN was used to compute the total economic impact.

Findings and Conclusions

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

Based on available data, on the average California blueberry growers spend more than $300.9 million annually for their acres in production and acres in development. This expenditure averages nearly $824,400 per day.

Expenditure levels are based on acres reported by the United States Department of Agriculture and estimates of average costs per acre for acres in production and acres in development. Based on this data, and discounted for some possible outmigration of spending, the economic impact of California blueberry growers is estimated to be more than $564.2 million annually, or more than $1.5 million per day. This does not include the economic impact of handlers and other intermediaries that help bring blueberries from farm to market. Thus, the total impacts shown below are conservative in nature.

Total Economic Impact	Total	Per Day
Output	$564,226,048	$1,545,825
Employment	3,853	n.a.
Labor Income	$228,661,509	$626,470
Indirect Business Taxes	$16,646,364	$45,606

The findings of this study show that blueberry growers have a significant impact on the State's economy. Overall, the growers create:

- More than $564.2 million in economic output, the best measure of economic impact, each year. This equates to more than $1.5 million each day of the year.

- More than 3,850 jobs on an annual full-time equivalent basis as a result of the business activities of growers and the multiplier effect their purchases generate in a variety of farming and non-farming economic sectors.
- Nearly $228.7 million in labor income as a result of grower activities, or about $626,470 per day. These are dollars going to wages and salaries for new employment as well as expanded incomes for those already in the labor force (e.g., overtime pay). These dollars are diffused throughout the State's economy as the funds are spent by households for an array of goods and services.
- More than $16.6 million in indirect business taxes, not including income taxes. This equates to more than $45,600 per day. Depending on how these funds are used, they can help pay for some or all of the State government's programs that further benefit the people residing in California.

Overall, it is clear that blueberry growers play a significant role in strengthening the economic climate of California. Their activities are diffused throughout the economy, touching nearly every aspect of life in the State.

SUMMARY REPORT OF FINDINGS

Introduction and Purpose

In February 2025, the U.S. Highbush Blueberry Council (hereafter, USHBC), retained The Tootelian Company to assist it in conducting a study to assess the economic impact blueberry growers (hereafter, growers) have within California (hereafter, State). This impact includes the increased business activity created by growing blueberries, the jobs created as a result of this activity throughout the various sectors of the State's economy, the increased labor income generated for those employed, and the indirect business taxes that are created. This is a follow-up to a previous economic impact study conducted in 2020.

Issues of the Study

Economic impact is a function of spending within a defined geographic area. The specific issues addressed in this study of blueberry growers in California were:

- How much business activity do growers create and how is the overall impact diffused through the various sectors of the State's economy?
- How many jobs does this business activity create?
- How much labor income is created and how could that income be diffused within the State's economy?
- How much does this business activity generate in indirect business taxes?

This study focused exclusively on growers. However, there are handlers and other intermediaries that also are involved in bringing the blueberries from farm to market which are important components of the entire blueberry industry. They were excluded from this analysis because insufficient financial data was available relative to their spending. Accordingly, this analysis understates the total economic impact of the blueberry industry.

The Consultant

The Tootelian Company is a Sacramento, California-based marketing and management consulting firm. It specializes in performing economic impact studies, conducting cost-benefit analyses, conducting market research surveys, and assisting its clients with their business and marketing plans.

The founder of the company and consultant for this study 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 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 for a wide variety of commodities in the agricultural sector. In addition, other clients for which economic impact studies have been conducted include the Chicago 2016 Olympic Games Committee, McDonald's Corporation, various trade and professional associations, and governmental entities.

Dr. Tootelian also has published approximately 100 articles dealing with all facets of business and has co-authored six college-level textbooks on marketing, small business management, and pharmacy 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.*

METHODOLOGY

Two models were used in this analysis. A specially designed economic input model was created to help define an average expenditure level by blueberry growers within California in an average year and to examine the IMPLAN-generated results. IMPLAN was used to compute the total economic impact created by blueberry growers.

Specialty Economic Input Model

To measure grower expenditures, a specialty economic model was created to measure the critical issues associated with growing blueberries within California. This model not only provided the data used in the IMPLAN analysis but analyzed the resulting total economic impact in more detailed ways.

Statistics were available from the United States Department of Agriculture (hereafter, USDA) for the number of acres in production and in development. However, statistics were not available for the average costs per acre to grow and harvest blueberries or for the average cost per acre to develop acres for future blueberry production. Accordingly, historical data was used to estimate average costs. This is explained further in the Findings section of this Summary Report.

IMPLAN

The model used to compute economic impact was IMPLAN. It provides modeling based on data and tools to assess economic impacts at the national, state, and local levels. IMPLAN is widely used by a variety of clients, including 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 range of economic impacts includes direct, indirect, and induced benefits:

- ***Direct benefits*** consist of economic activity contained exclusively within the wholesale sector. This includes expenditures made and 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 food, housing, transportation, and professional 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 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 reflects the increased economic activity that comes from sales being generated, and expenses being incurred, by blueberry growers. For example, when a grower plants, cultivates, and harvests blueberries, 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 nearly all economic sectors in California. The net effect is that sales dollars are recycled in the State through this process of sales requiring additional purchases and employment, which results in sales for other firms who must use that money to make their own purchases and hire people.

Data Sources

Government and industry statistics were used to determine average numbers of acres and expenses per acre, as well as some other operating data for this study. However, to ensure that this information was appropriate, the USHBC was asked to verify that the statistics being used were reasonable for California growers. Based on the information received from the USHBC, the statistics were modified as deemed appropriate. Information from economic impact studies conducted by the analyst previously for the blueberry industry and for other commodity organizations also were used as deemed appropriate.

Information about the industry and data used to assess the economic impact came from such sources as:

- State of California's official website
- United States Bureau of the Census
- United States Bureau of Labor Statistics
- United States Department of Agriculture, National Agricultural Statistics Service
- United States Department of Agriculture, Census of Agriculture
- United States Government official website

Caveats

The results of any research should be used with caution and at the reader's own discretion. Every study, no matter how well constructed, contains the possibility of some degree of error. Accordingly, the reader assumes sole responsibility for the use of this information.

FINDINGS OF THE ANALYSES

The findings of this study are presented in four sections: Computation of Expenditures Used in the Analyses, Economic Impact of Growers, Possible Diffusion of Labor Income Spending, and Possible Uses for Indirect Business Taxes Generated. Tabled data is presented at the end of this Summary Report.

Computation of Expenditures Used in the Analyses

Expenditure estimates for growers were based on multiplying the average number of acres by the average costs per acre. Total grower expenditures were the combined costs of growing and harvesting blueberries for acres in production and the costs of acres in development.

An "average" year was created by using acres and expenditure estimates for 2021, 2022, and 2023. This process was preferred to using just a single year because it eliminated the possibility of using one year which might have had abnormally large or small expenditures. Using a three-year average gave a better representation of what might occur each year.

Number of Acres

The numbers of acres in production were obtained from the USDA's National Agricultural Statistics Service (hereafter NASS). This source provided the number of acres harvested (i.e., acres in production) from 2021 through 2023.

Statistics on the State's acres in development were obtained from the most current Census of Agriculture reports. To estimate the number of acres in development for the years 2021 through 2023, the historical ratios of acres in development to acres of blueberries in production were computed and averaged. This ratio was then applied to the average acres in production to estimates of acres in development for this study.

After consultations with the USHBC, the three-year average number of acres used for this study was 7,933 for acres in production and 953 acres in development.

Cost per Acre

Since current statistics were not available for the average cost per acre for acres in production and for acres in development, it was necessary to update the costs used for the 2020 study which were derived from relatively current studies at that time by an inflation factor.

Average costs for this study were computed by determining the average annual growth rate in crop farms production expenditures. The average growth rate for crop farm production expenditures from 2020 through 2023 was 11.6% per year. This growth rate was then applied to the 2020 costs per acre to arrive at costs per acre for each year from 2021 through 2024. Then, a three-year average for costs per acre for acres in production and acres in development was developed.

It was not considered appropriate to include depreciation and amortization since this is not an immediate expenditure. However, 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 have to make capital purchases, 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 otherwise be in terms of estimating the economic impact on the U.S. economy by growers.

Expenditures per acre also were adjusted downward to reflect the possible out-migration of some dollars for purchases of goods and services made outside of the State. Making this adjustment also results in the net total expenditures for growers being more conservative.

After these reductions, the three-year average cost for acres in production was found to be $36,325 per acre and the cost for acres in development was $13,357 per acre.

It is recognized that grower costs per acre can vary widely based on geographic area, the methods of growing employed, whether the blueberries are for fresh or processed markets, prevailing wage rates, and other factors. However, estimates used in this

study for the costs per acre for acres in production and for acres in development represent averages that span the range in grower expenditures.

Net Grower Expenditures

Net total expenditures by growers were a function of the average costs per acre multiplied by the average number of acres. Based on these computations, the net total expenditures for growers were computed to be more than $300.9 million in an average year, or more than $824,400 per day. Average annual expenditures for acres in production are nearly $288.2 million and more than $12.7 million for acres in development. This is shown below and also presented in Table One.

Grower Operations	Average Acres	Average Cost Per Acres	Net Expenditures	Expenditures per Day
Acres in Production	7,933	$36,325	$288,176,769	$789,525
Acres in Development	953	$13,357	$12,735,322	$34,891
Total Spending	n.a.	n.a.	$300,912,091	$824,417

It is again important to note that these expenditures are for growers only. This analysis does not include expenditures by handlers and other intermediaries who are part of the process of bringing blueberries from field to market. The result is that the expenditures included in this analysis is even more conservative as a result of this omission.

Economic Impact of Growers

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

Total Economic Impact

The Output, Employment, Labor Income, and Indirect Business Taxes for California blueberry growers are presented in Table Two in total and Table Three on a per-day basis and summarized below.

Total Economic Impact	Total	Per Day
Output	$564,226,048	$1,545,825
Employment	3,853	n.a.
Labor Income	$228,661,509	$626,470
Indirect Business Taxes	$16,646,364	$45,606

Output. The Output, or the amount of overall business activity created, is projected to total more than $564.2 million, equating to more than $1.5 million each day of the year. This includes the direct spending by 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 caused by the incremental labor income ("Induced"). About 53.3% of this impact is caused by grower spending, and the remainder (46.7%) is the result of increased business activity.

As shown below, the industries generating the largest increases in overall business activity were farming ($346.1 million), real estate/construction/finance/insurance ($68.3 million), professional services ($27.0 million), manufacturing ($22.6 million), and retailing ($20.7 million).

Industry	Output
Farming	$346,082,142
Real Estate, Const., Fin., Ins.	$68,261,113
Professional Services	$27,021,072
Manufacturing	$22,579,103
Retailing	$20,747,966

Job Creation. More than 3,850 additional jobs are expected to be created as a result of the increased business activity. This is computed on an annual full-time equivalent basis. About 55.2% of this is the result of grower operations and the rest (44.8%) is due to the increased business activity caused by the ripple effect of grower spending and the spending of others.

As shown below, the industries generating the largest increases in full-time-equivalent job creation were farming (2,859 jobs), retailing (206 jobs), real estate/construction/finance/insurance (174 jobs), professional services (135 jobs), and health (106 jobs).

Industry	Employment
Farming	2,859
Retailing	206
Real Estate, Const., Fin., Ins.	174
Professional Services	135
Health	106

Labor Income. Labor Income resulting from the additional people employed and current employees earning more is projected to be nearly $228.7 million, equating to about $626,470 each day of the year. About 54.2% of this income is the direct result of spending by growers, while 45.8% is due to increased business activity. How these funds are likely to be spent across various sectors of the State's economy is based on consumer purchasing patterns described later in this Summary Report.

As shown below, the industries generating the largest increases in labor income were farming ($160.1 million), real estate/construction/finance/insurance ($12.9 million), professional services ($10.7 million), retailing ($9.6 million), and health ($9.4 million).

Industry	Labor Income
Farming	$160,078,624
Real Estate, Const., Fin., Ins.	$12,873,651
Professional Services	$10,654,027
Retailing	$9,647,333
Health	$9,449,382

Indirect Business Taxes. Finally, more than $16.6 million in additional indirect business taxes are created from the increased business activity, equating to more than $45,600 each day of the year. These tax dollars are generated from businesses benefiting from the heightened economic activity and the increased employment. About 15.3% of these indirect business taxes are the direct result of spending by growers, while 84.7% is due to the increased business activity. As is described later in this Summary Report, these tax dollars can be used for programs that further serve residents of communities within California.

As shown below, the industries generating the largest increases in indirect business taxes were wholesaling ($4.7 million), farming ($3.8 million), real estate/construction/finance/insurance ($3.3 million), retailing ($2.5 million), and accommodations/food services ($700,000).

Industry	Business Taxes
Wholesaling	$4,705,811
Farming	$3,784,648
Real Estate, Const., Fin., Ins.	$3,329,302
Retailing	$2,485,244
Accommodations, Food	$697,234

Possible Diffusion of Labor Income Spending

The labor income that is created will be diffused throughout the various sectors of the State'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 to various economic sectors in California, consumer expenditures across various categories 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 that are generated for selected sectors are shown below and in more detail in Table Four.

Possible Household Spending	Annual	Per Day
Food	**$29,188,974**	**$79,970**
Food at home	$17,102,935	$46,857
Food away from home	$12,086,039	$33,112
Housing	**$78,659,750**	**$215,506**
Shelter & utilities	$62,437,482	$171,062
Household operations & supplies	$8,071,464	$22,114
Household furnishings & equipment	$8,153,448	$22,338
Apparel and services	**$6,040,375**	**$16,549**
Transportation	**$37,405,894**	**$102,482**
Vehicle purchases (net outlay)	$14,106,550	$38,648
Public and other transportation	$3,274,074	$8,970
Other	$20,025,271	$54,864
Healthcare	**$16,362,434**	**$44,829**
Entertainment	**$11,208,016**	**$30,707**
Personal care products & services	**$2,745,144**	**$7,521**
Education	**$3,660,192**	**$10,028**

As shown above, the greatest amount of spending was for housing ($78.7 million), transportation ($37.4 million), and food ($29.2 million). These three account for 63.5% of the total additional labor income spending.

Possible Uses for Indirect Business Taxes Generated

To illustrate how the indirect business tax dollars could be used to help fund some of California's departments/agencies, the 2024 fiscal year budgets of a variety of agencies were obtained from the State's government'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 State agencies.

Presented below is the percentage of various 2024 fiscal year federal agency budgets that could be covered by the indirect business tax dollars generated by the increased business activity within California. It is important to recognize that the total indirect business tax dollars generated were applied to **each** State department/agency. A sample of department/agencies' budgets is listed below and a larger list is presented in Table Five.

State of California	2024-25 State Funds	% of Budget Could Fund*
Arts Council	$32,142,000	51.8%
California Conservation Corps	$154,845,000	10.8%
Children & Families Commission	$342,363,000	4.9%
Department of Aging	$171,178,000	9.7%
Department of Child Support Services	$373,920,000	4.5%
Department of Conservation	$179,684,000	9.3%
Department of Consumer Affairs	$745,873,000	2.2%
Department of Fish & Wildlife	$586,181,000	2.8%
Department of Food & Agriculture	$444,940,000	3.7%
Department of Parks, Recreation	$765,785,000	2.2%
Department of Rehabilitation	$89,661,000	18.6%
Department of Veterans Affairs	$597,720,000	2.8%
Emergency Medical Services Authority	$43,608,000	38.2%
Employment Development Department	$1,110,340,000	1.5%
Military Department	$161,396,000	10.3%
Office of Emergency Services	$979,530,000	1.7%
Summer School for the Arts	$3,480,000	478.3%

SUMMARY AND CONCLUSIONS

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

Based on available data, on the average California blueberry growers spend more than $300.9 million annually for their acres in production and acres in development. This expenditure averages nearly $824,400 per day.

Expenditure levels are based on acres reported by the United States Department of Agriculture and estimates of average costs per acre for acres in production and acres in development. Based on this data, and discounted for some possible outmigration of spending, the economic impact of California blueberry growers is estimated to be more than $564.2 million annually, or more than $1.5 million per day. This does not include the economic impact of handlers and other intermediaries that help bring blueberries from farm to market. Thus, the total impacts shown below are conservative in nature.

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The findings of this study show that blueberry growers have a significant impact on the State's economy. Overall, the growers create:

- More than $564.2 million in economic output, the best measure of economic impact, each year. This equates to more than $1.5 million each day of the year.
- More than 3,850 jobs on an annual full-time equivalent basis as a result of the business activities of growers and the multiplier effect their purchases generate in a variety of farming and non-farming economic sectors.
- Nearly $228.7 million in labor income as a result of grower activities, or about $626,470 per day. These are dollars going to

wages and salaries for new employment as well as expanded incomes for those already in the labor force (e.g., overtime pay). These dollars are diffused throughout the State's economy as the funds are spent by households for an array of goods and services.

- More than $16.6 million in indirect business taxes, not including income taxes. This equates to more than $45,600 per day. Depending on how these funds are used, they can help pay for some or all of the State government's programs that further benefit the people residing in California.

Overall, it is clear that blueberry growers play a significant role in strengthening the economic climate of California. Their activities are diffused throughout the economy, touching nearly every aspect of life in the State.

TABLE ONE: AVERAGE ANNUAL GROWER EXPENDITURES WITHIN CALIFORNIA

Total Impact

Grower Operations	Average Acres	Average Cost Per Acres	Net Expenditures
Acres in Production	7,933	$36,325	$288,176,769
Acres in Development	953	$13,357	$12,735,322
Total Spending	n.a.	n.a.	$300,912,091

TABLE TWO: AVERAGE ANNUAL ECONOMIC IMPACT OF CALIFORNIA BLUEBERRY GROWERS

Total Impact

	Output Direct	Output Indirect	Output Induced	Output Total
Manufacturing	n.a.	$13,579,677	$8,999,426	$22,579,103
Wholesaling	n.a.	$13,088,740	$7,636,508	$20,725,248
Retailing	n.a.	$1,326,358	$19,421,608	$20,747,966
Real Estate/ Const./Fin./Ins..	n.a.	$16,452,038	$51,809,075	$68,261,113
Professional Services	n.a.	$6,791,185	$20,229,887	$27,021,072
Administrative	n.a.	$2,099,288	$6,515,923	$8,615,210
Education	n.a.	$28,939	$2,394,903	$2,423,842
Health	n.a.	$220	$16,583,471	$16,583,691
Arts, entertainment, recreation	n.a.	$867,140	$5,090,860	$5,958,000
Accommodations, food services	n.a.	$486,634	$8,241,886	$8,728,520
Other	n.a.	$4,224,843	$7,175,832	$11,400,674
Farming	$300,912,091	$44,168,218	$1,001,832	$346,082,142
Federal	n.a.	$134,559	$364,432	$498,992
State and local	n.a.	$2,128,288	$2,472,188	$4,600,476
Total	$300,912,091	$105,376,126	$157,937,832	$564,226,048

AVERAGE ANNUAL ECONOMIC IMPACT OF CALIFORNIA BLUEBERRY GROWERS (continued)

Employment

	Employment Direct	Employment Indirect	Employment Induced	Employment Total
Manufacturing	n.a.	17	17	33
Wholesaling	n.a.	37	20	57
Retailing	n.a.	10	197	206
Real Estate/ Const./Fin./Ins.	n.a.	66	108	174
Professional Services	n.a.	27	108	135
Administrative	n.a.	14	42	56
Education	n.a.	0	27	28
Health	n.a.	0	106	106
Arts, entertainment, recreation	n.a.	4	34	38
Accommodations, food services	n.a.	5	89	94
Other	n.a.	11	39	50
Farming	2,128	727	5	2,859
Federal	n.a.	1	3	4
State and local	n.a.	6	7	13
Total	2,128	924	801	3,853

AVERAGE ANNUAL ECONOMIC IMPACT OF CALIFORNIA BLUEBERRY GROWERS (continued)

Indirect Labor Income

	Labor Income Direct	Labor Income Indirect	Labor Income Induced	Labor Income Total
Manufacturing	n.a.	$1,433,362	$1,327,288	$2,760,650
Wholesaling	n.a.	$3,295,689	$2,071,015	$5,366,704
Retailing	n.a.	$584,447	$9,062,885	$9,647,333
Real Estate/ Const./Fin./Ins.	n.a.	$4,381,173	$8,492,478	$12,873,651
Professional Services	n.a.	$2,727,822	$7,926,205	$10,654,027
Administrative	n.a.	$1,218,412	$3,461,598	$4,680,010
Education	n.a.	$16,074	$1,524,736	$1,540,809
Health	n.a.	$116	$9,449,266	$9,449,382
Arts, entertainment, recreation	n.a.	$385,382	$2,204,175	$2,589,557
Accommodations, food services	n.a.	$192,059	$3,050,813	$3,242,872
Other	n.a.	$1,174,412	$2,543,262	$3,717,674
Farming	$123,843,450	$35,908,003	$327,170	$160,078,624
Federal	n.a.	$107,751	$246,392	$354,143
State and local	n.a.	$740,036	$966,037	$1,706,073
Total	$123,843,450	$52,164,739	$52,653,321	$228,661,509

AVERAGE ANNUAL ECONOMIC IMPACT OF CALIFORNIA BLUEBERRY GROWERS (continued)

Indirect Business Taxes

	Business Taxes Direct	Business Taxes Indirect	Business Taxes Induced	Business Taxes Total
Manufacturing	n.a.	$147,493	$152,258	$299,751
Wholesaling	n.a.	$3,212,472	$1,493,339	$4,705,811
Retailing	n.a.	$152,576	$2,332,668	$2,485,244
Real Estate/ Const./Fin./Ins.	n.a.	$333,210	$2,996,092	$3,329,302
Professional Services	n.a.	$152,504	$450,138	$602,642
Administrative	n.a.	$15,705	$59,853	$75,558
Education	n.a.	$619	$51,786	$52,405
Health	n.a.	$2	$176,264	$176,265
Arts, entertainment, recreation	n.a.	$10,347	$119,436	$129,783
Accommodations, food services	n.a.	$38,103	$659,130	$697,234
Other	n.a.	$245,751	$386,914	$632,665
Farming	$2,550,886	$1,217,728	$16,034	$3,784,648
Federal	n.a.	-$2,041	-$12,010	-$14,051
State and local	n.a.	-$146,094	-$164,799	-$310,893
Total	$2,550,886	$5,378,375	$8,717,103	$16,646,364

TABLE THREE: AVERAGE DAILY ECONOMIC IMPACT OF CALIFORNIA BLUEBERRY GROWERS

Total Impact — Per Day

	Output Direct	Output Indirect	Output Induced	Output Total
Manufacturing	n.a.	$37,205	$24,656	$61,861
Wholesaling	n.a.	$35,860	$20,922	$56,782
Retailing	n.a.	$3,634	$53,210	$56,844
Real Estate/ Const./Fin./Ins.	n.a.	$45,074	$141,943	$187,017
Professional Services	n.a.	$18,606	$55,424	$74,030
Administrative	n.a.	$5,751	$17,852	$23,603
Education	n.a.	$79	$6,561	$6,641
Health	n.a.	$1	$45,434	$45,435
Arts, entertainment, recreation	n.a.	$2,376	$13,948	$16,323
Accommodations, food services	n.a.	$1,333	$22,581	$23,914
Other	n.a.	$11,575	$19,660	$31,235
Farming	$824,417	$121,009	$2,745	$948,170
Federal	n.a.	$369	$998	$1,367
State and local	n.a.	$5,831	$6,773	$12,604
Total	$824,417	$288,702	$432,706	$1,545,825

AVERAGE DAILY ECONOMIC IMPACT OF CALIFORNIA BLUEBERRY GROWERS (continued)

Employment — Per Day (not applicable)

	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	n.a.	n.a.	n.a.	n.a.
Real Estate/ Const./Fin./Ins.	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, food services	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.

AVERAGE DAILY ECONOMIC IMPACT OF CALIFORNIA BLUEBERRY GROWERS (continued)

Indirect Labor Income — Per Day

	Labor Income Direct	Labor Income Indirect	Labor Income Induced	Labor Income Total
Manufacturing	n.a.	$3,927	$3,636	$7,563
Wholesaling	n.a.	$9,029	$5,674	$14,703
Retailing	n.a.	$1,601	$24,830	$26,431
Real Estate/ Const./Fin./Ins.	n.a.	$12,003	$23,267	$35,270
Professional Services	n.a.	$7,473	$21,716	$29,189
Administrative	n.a.	$3,338	$9,484	$12,822
Education	n.a.	$44	$4,177	$4,221
Health	n.a.	$0	$25,888	$25,889
Arts, entertainment, recreation	n.a.	$1,056	$6,039	$7,095
Accommodations, food services	n.a.	$526	$8,358	$8,885
Other	n.a.	$3,218	$6,968	$10,185
Farming	$339,297	$98,378	$896	$438,572
Federal	n.a.	$295	$675	$970
State and local	n.a.	$2,027	$2,647	$4,674
Total	$339,297	$142,917	$144,256	$626,470

AVERAGE DAILY ECONOMIC IMPACT OF CALIFORNIA BLUEBERRY GROWERS (continued)

Indirect Business Taxes — Per Day

	Business Taxes Direct	Business Taxes Indirect	Business Taxes Induced	Business Taxes Total
Manufacturing	n.a.	$404	$417	$821
Wholesaling	n.a.	$8,801	$4,091	$12,893
Retailing	n.a.	$418	$6,391	$6,809
Real Estate/ Const./Fin./Ins.	n.a.	$913	$8,208	$9,121
Professional Services	n.a.	$418	$1,233	$1,651
Administrative	n.a.	$43	$164	$207
Education	n.a.	$2	$142	$144
Health	n.a.	$0	$483	$483
Arts, entertainment, recreation	n.a.	$28	$327	$356
Accommodations, food services	n.a.	$104	$1,806	$1,910
Other	n.a.	$673	$1,060	$1,733
Farming	$6,989	$3,336	$44	$10,369
Federal	n.a.	-$6	-$33	-$38
State and local	n.a.	-$400	-$452	-$852
Total	$6,989	$14,735	$23,882	$45,606

TABLE FOUR: POSSIBLE DIFFUSION OF ANNUAL INCREMENTAL LABOR INCOME

Total Labor Income	$228,661,509	$626,470
Possible Household Spending	**Annual**	**Per Day**
Food	**$29,188,974**	**$79,970**
Food at home	$17,102,935	$46,857
Food away from home	$12,086,039	$33,112
Housing	**$78,659,750**	**$215,506**
Shelter	$50,221,855	$137,594
Utilities, fuels, and public services	$12,215,627	$33,467
Household operations	$5,900,208	$16,165
Housekeeping supplies	$2,171,256	$5,949
Household furnishings and equipment	$8,153,448	$22,338
Apparel and services	**$6,040,375**	**$16,549**
Transportation	**$37,405,894**	**$102,482**
Vehicle purchases (net outlay)	$14,106,550	$38,648
Gasoline and other fuels	$8,777,585	$24,048
Other vehicle expenses	$11,226,528	$30,758
Public and other transportation	$3,274,074	$8,970
Healthcare	**$16,362,434**	**$44,829**
Entertainment	**$11,208,016**	**$30,707**
Personal care products and services	**$2,745,144**	**$7,521**
Reading	**$433,722**	**$1,188**
Education	**$3,660,192**	**$10,028**
Miscellaneous	**$6,304,840**	**$17,274**
Cash contributions	**$8,983,867**	**$24,613**
Personal insurance and pensions	**$27,668,302**	**$75,804**
Life and other personal insurance	$1,592,078	$4,362
Pensions and Social Security	$26,076,224	$71,442

TABLE FIVE: POSSIBLE COVERAGE OF CALIFORNIA BUDGETS WITH INCREMENTAL INDIRECT BUSINESS TAXES

State of California	2024-25 State Funds	% of Budget Could Fund*
Arts Council	$32,142,000	51.8%
California Conservation Corps	$154,845,000	10.8%
Children & Families Commission	$342,363,000	4.9%
Community Services & Development	$943,000	1765.3%
Department of Aging	$171,178,000	9.7%
Department of Child Support Services	$373,920,000	4.5%
Department of Conservation	$179,684,000	9.3%
Department of Consumer Affairs	$745,873,000	2.2%
Department of Developmental Services	$10,287,372,000	0.2%
Department of Fish & Wildlife	$586,181,000	2.8%
Department of Food & Agriculture	$444,940,000	3.7%
Department of Forestry, Fire Protection	$3,211,112,000	0.5%
Department of Housing, Community Development	$1,837,285,000	0.9%
Department of Industrial Relations	$928,999,000	1.8%
Department of Parks, Recreation	$765,785,000	2.2%
Department of Public Health	$1,978,849,000	0.8%
Department of Rehabilitation	$89,661,000	18.6%
Department of Social Services	$20,516,520,000	0.1%
Department of the California Highway Patrol	$3,193,214,000	0.5%
Department of Transportation	$8,567,343,000	0.2%
Department of Veterans Affairs	$597,720,000	2.8%
Department of Water Resources	$1,602,563,000	1.0%
Emergency Medical Services Authority	$43,608,000	38.2%
Employment Development Department	$1,110,340,000	1.5%
Military Department	$161,396,000	10.3%
Office of Emergency Services	$979,530,000	1.7%
Resources Recycling & Recovery	$2,021,277,000	0.8%
State Library	$204,255,000	8.1%
Summer School for the Arts	$3,480,000	478.3%

**Percent is total of Indirect Business Taxes applied to EACH budget line. If the percentage exceeds 100.0%, it indicates the indirect business taxes would pay more than the budget.*