



Economic Contributions of **ORANGE** *County* Agriculture





**The Honorable
Board of Supervisors,
County of Orange**



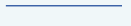
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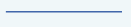


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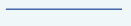
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Agricultural Commissioner's Letter

I am pleased to share the **Economic Contributions of Orange County Agriculture**, a comprehensive analysis that reveals the true scope of agriculture's impact on our local economy.

This report takes an important step beyond the Orange County Crop Report that we have published every year for over a century. Instead of stopping at crop production values and acreage, it quantifies agriculture's total economic contributions through production, local processing, employment, and economic multiplier effects.

In short, this report uses twenty-first-century economic tools to document agriculture's broader role in sustaining a thriving local economy.

This new study shows that in 2024, the latest year for which we have complete data, agriculture contributed a total of \$178,875,655 to the county economy. This far exceeds the \$73,589,000 farm gate value from our 2024 Orange County Crop Report. Agricultural production and processing also directly supported 1,337 jobs, plus another 351 employees from multiplier effects.

This report also documents the level of economic diversification within agriculture, which has important implications for both the agricultural industry and the broader county economy.

Agriculture has a long tradition in Orange County. For more than a century, it has been a vital component of our economy and culture. With this report, we deepen our understanding of that tradition and renew our commitment to sustaining it well into the future.

Respectfully submitted,

Jose Arriaga
Agricultural Commissioner/Sealer of Weights & Measures



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Orange County Agriculture at a Glance

Economic Contributions

of the Agricultural Industry for 2024



\$178.9

MILLION (ROUNDED)

Orange County Agriculture's total
contributions to the local economy



\$109.6

MILLION in direct
economic output



\$69.2

MILLION in
multiplier effects



\$490,000

per day

Employment Effects

of the Agricultural Industry



1,688

total jobs



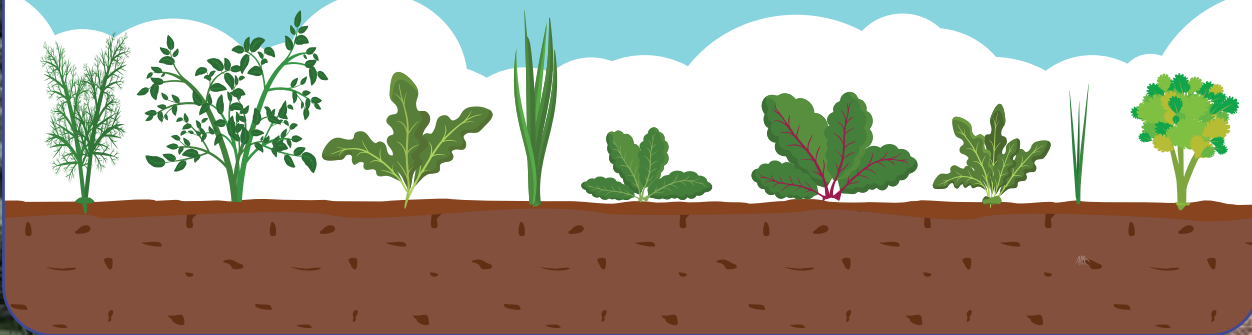
1,337

direct employees
across production
& processing



351

additional jobs attributable to
multiplier effects: expenditures by
agricultural companies and their
employees



Introduction

Located along Southern California's iconic coastline, Orange County blends urban energy with a vibrant and enduring agricultural scene.

Local growers produce high-value nursery plants, greenhouse crops, strawberries, avocados, and specialty vegetables in a mild Mediterranean climate. Though much of the historic citrus and row-crop land has given way to homes and businesses, the remaining farms focus on quality, efficiency and niche markets. From ornamentals that beautify communities to fresh produce for regional tables, Orange County agriculture adds color, flavor, and open space to this vibrant coastal county.

Clearly, agriculture plays a vital role in the Orange County economy. What's not so clear, however, is the true size of that role. How much money does agriculture contribute to the local economy? How many jobs does agriculture support? In other words, just how important is agriculture as a driver of Orange County's economic health?

This report sheds light on these and related questions. Using multiple data sources and advanced economic modeling techniques, it analyzes agriculture's total contribution to the Orange County economy. The report also examines economic diversification in agriculture and its implications for resilience to economic shocks. Overall, the findings offer important information for policymakers, the public, and anyone who values a vibrant and resilient local economy.

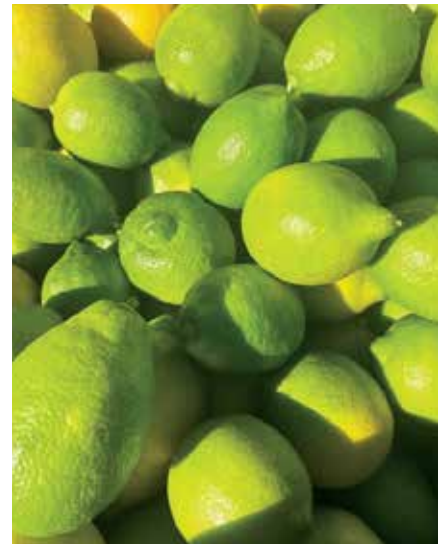
Our Approach

A *basic industry* sells most of its products beyond the local area and thus brings outside money into local communities. Agriculture easily qualifies as a basic industry in Orange County. Calculating a reasonable range of economic contributions by a basic industry requires quantifying three economic areas: 1) *direct* economic effects; 2) *indirect* economic effects; and 3) *induced* economic effects. This report covers all three.

Direct economic effects include farm production, local processing, and their related employment. *Indirect* effects consist of inter-industry, business-to-business supplier purchases. *Induced* effects reflect consumption spending by employees. The **Multiplier Effects** section on page 8 explains this further.

Our calculations draw from local and national data sources. The local sources include industry experts and a decade of annual Orange County Crop Reports (2015 through 2024) produced by the Orange County Agricultural Commissioner/Sealer of Weights & Measures. The main national data source is IMPLAN, a widely used economic modeling program (see www.implan.com).

Originally created for the U.S. Department of Agriculture (USDA), IMPLAN uses econometric modeling to convert data from more than a dozen government sources into local values for every U.S. county and zip code across 528 industry sectors.



Direct Effects of Orange County Farm Production

This section focuses on the simplest measures of economic activity: production and employment. It describes total farm production and the number of agricultural jobs.

PRODUCTION

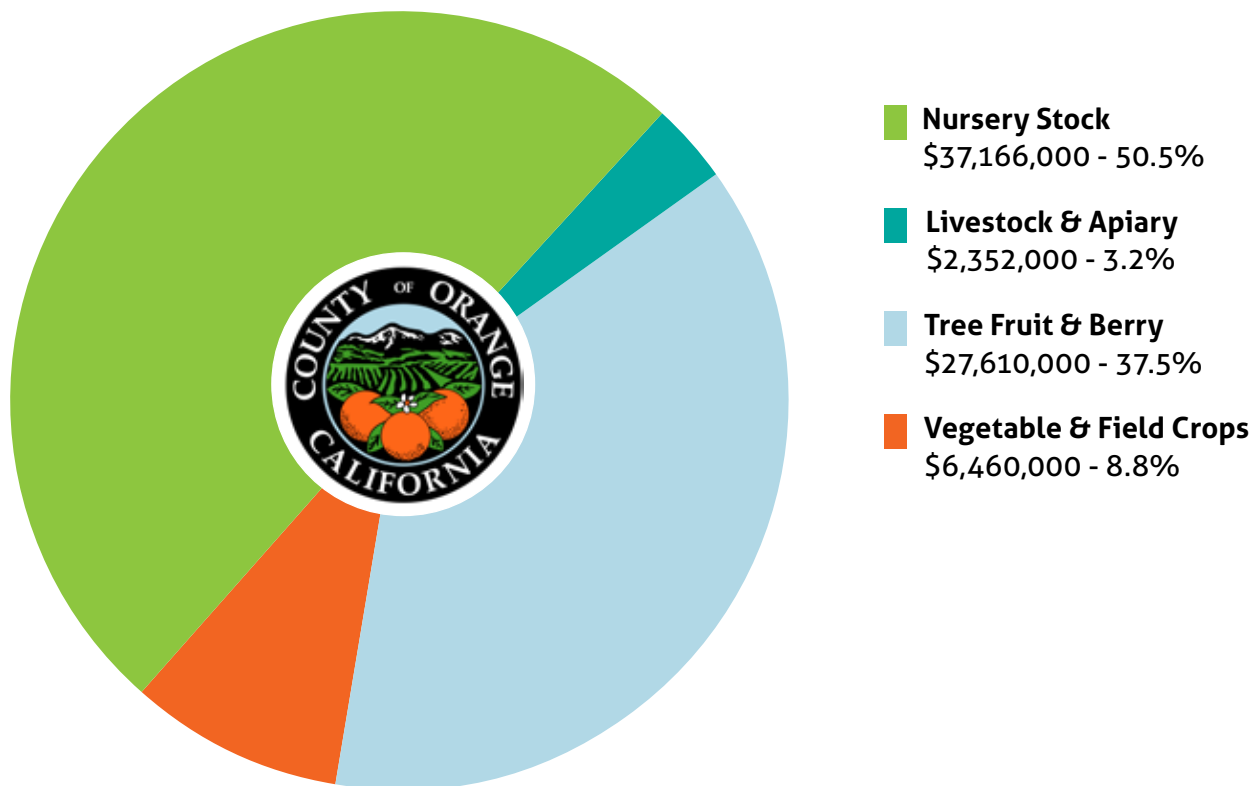
Figure 1 shows the various categories that contributed to Orange County's farm production value. Valued at \$37,166,000, Nursery Stock was the single largest production category by dollar value, comprising 50.5% of the county total. Ornamental Trees & Shrubs led this category at \$27,075,000. Palms followed at \$4,587,000, then Cacti & Succulents at \$3,644,000.

At 37.5%, Tree Fruit and Berry represented the second largest category (\$27,610,000). Citrus, Avocados and Strawberries dominated this grouping (\$27,210,000). Vegetable and Field Crops was the third largest category at \$6,460,000 (8.8%), led by Root Vegetables (\$2,757,000).

The combined total dollar value for all agricultural products decreased \$51,887,000 over the previous decade (41%), from \$125,476,000 in 2015 to \$73,589,000 in 2024. Inflation totaled 28.4% during the period. These values represent gross output and do not reflect the net profit or financial performance of individual growers or the industry as a whole. Interested readers are encouraged to consult the county's 2024 Orange County Crop Report for additional details on specific products and their value.

Figure 1. Distribution of Orange County Farm Production

Figures represent gross production value, not net profit. Source: 2024 Orange County Crop Report, Office of the Orange County Agricultural Commissioner/Sealer of Weights & Measures



EMPLOYMENT

How many people work in agricultural production? In 2024, IMPLAN data indicate that agricultural production directly employed 926 people in Orange County. This figure encompassed a wide range of production-related jobs, including not just growing and harvesting, but also sales, marketing, and many other roles. It did not include food processing jobs, which are discussed on page 10. Nor did it include Orange County's public sector jobs in agriculture across a range of local, state, and federal agencies. Readers who want to know more about employment estimates are encouraged to consult IMPLAN's "Data Sources for Select Industries: Farm, Construction, Railroad, and Government" article referenced earlier.

These jobs provide stable employment opportunities, support small and family-owned businesses, and contribute to the region's economic resilience. In addition, the agricultural workforce helps protect the county's food supply, environmental resources, and public health through ongoing agricultural production activities. Beyond their direct impact on agribusinesses, agricultural jobs also support the local economy by driving demand for housing, retail, transportation, and other professional services throughout the community.



Multiplier Effects of Orange County Farm Production

This section quantifies the economic ripples that farm production creates in the local economy. These ripples take two forms: *indirect effects* and *induced effects*. The first consists of business-to-business supplier purchases. For instance, when an Orange County producer buys vehicles, machinery, fertilizer, fuel, chemicals, insurance, banking services, veterinary supplies, and other inputs, the producer creates *indirect effects*.

The second ripple type, *induced effects*, consists of consumption spending by the combined owners and employees of agricultural businesses and their suppliers. They pay for groceries, housing, healthcare, leisure activities, and other things for their households. All this spending creates ripples in the economy.

Although agricultural companies, suppliers and their combined employees certainly spend money outside Orange County, this study only reflects those expenditures within the county.

Figure 2 shows agriculture's *direct*, *indirect*, and *induced* economic effects within the county across major production categories. The numbers reflect IMPLAN multipliers for each sector, which are rooted in the most recent U.S. Bureau of Economic Analysis input-output models.

Figure 2. Economic Effects of Orange County Farm Production

Figures are for 2024 and come from IMPLAN and U.S. Bureau of Economic Analysis, with adjustments based on production data from the 2024 Orange County Crop Report. Columns and rows may not compute exactly due to rounding.

FARM PRODUCTION SECTOR	Output Effects (\$ Millions)			TOTAL
	Direct	Indirect	Induced	
Nursery Stock	\$37.2	\$10.8	\$12.1	\$60.0
Tree Fruit & Berry	\$27.6	\$5.9	\$15.1	\$48.6
Vegetable & Field	\$6.5	\$2.2	\$1.3	\$9.9
Livestock & Apiary	\$2.4	\$0.1	\$1.2	\$3.7
TOTAL ECONOMIC OUTPUT:	\$73.6	\$18.9	\$29.6	\$122.1
	Employment Effects (# of Jobs)			TOTAL
	Direct	Indirect	Induced	
TOTAL EMPLOYMENT:	926	108	147	1,181

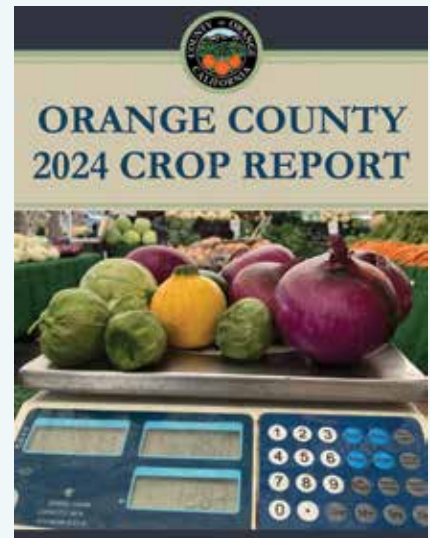
Sector names and production values in **Figure 2** closely match the county's annual report but draw from a standard classification system used nationwide called the North American Industrial Classification System (NAICS), as adapted by IMPLAN. Each year, agricultural producers in Orange County and nationwide use the NAICS categories on Schedule F of their federal tax returns ("Profit or Loss from Farming"), which requires them to designate the NAICS category that best fits their operation. Producers also use NAICS categories when completing the USDA Census of Agriculture, most recently for 2022.

"Nursery Stock" in **Figure 2**, for example, draws from the NAICS/IMPLAN sector called "Greenhouse, Nursery, and Floriculture Production." Similarly, "Tree Fruit & Berry" in **Figure 2** is based on the NAICS/IMPLAN sector "Fruit Farming." The remaining two categories, "Vegetable & Field" and "Livestock & Apiary," both draw from multiple, relevant NAICS/IMPLAN sectors.

Each sector has distinct multipliers. The Orange County “Fruit Farming” sector, for instance, had a 2024 *indirect effects* multiplier of 0.2157 and an *induced effects* multiplier of 0.5478. This means that each dollar’s worth of direct output generated an extra 21 cents in supplier purchases, plus 54 cents more in consumption spending by the owners and employees of agricultural businesses and their suppliers.

The following list details the various commodities that make up each category in **Figure 2**, based on the 2024 Orange County Crop Report:

- **Nursery Stock:** Ornamental Trees & Shrubs, Cacti & Succulents, Palms; and Liners, Potted Plants, Cut Flowers & Cut Trees.
- **Tree Fruit & Berry:** Avocados, Bushberries, Grapes, Lemons, Oranges, Strawberries, Misc. Orchard Crops.
- **Vegetable & Field:** Brassicas (Broccoli, Cabbage, Cauliflower, Kale), Cucurbits (Cucumbers, Melons, Squash, Pumpkins, Watermelons), Root Vegetables (Beets, Carrots, Radishes, Turnips), Alliums (Garlic, Green Onions, Leeks, Onions), and Misc. Vegetables (Field Crops, Pasture Rental).
- **Livestock & Apiary:** Misc. Livestock (Cattle, Chickens, Dairy, Eggs, Goats, Rabbits, Sheep, Swine, Turkeys); Misc. Apiary (Bees and Queens, Beeswax, Honey, Pollen, Pollination).



Multipliers change every year for each sector and county nationwide. The multipliers update to reflect where companies and employees spent their money. The *indirect effects* multiplier for Orange County "Greenhouse, Nursery, and Floriculture Production" was 0.0988 in 2017, for example, then increased to 0.2898 for 2024.

Sectors have unique multipliers not just for economic output but also for employment. For example, Orange County "Fruit Farming" in **Figure 2** supported 500 *direct* jobs plus an additional 42 *indirect effects* jobs and 74 more from *induced effects*. The bottom row of **Figure 2** shows combined employment figures across sectors.

Production KEY POINTS

\$122.1
MILLION

in **TOTAL**
economic output
from
Farm Production

1,181
TOTAL JOBS

926 direct jobs
plus an additional
255 jobs from
**MULTIPLIER
EFFECTS**

\$73.6
MILLION

in **DIRECT**
output from
Farm Production

\$48.5
MILLION

in **MULTIPLIER
EFFECTS** from
Farm Production

Locally Sourced, Value-Added Processing

Farm production tells only part of the story. This section captures the economic value of local processing, which plays an important role in the Orange County economy. It is neither an exact science nor a full assessment but rather gives the reader a basic overview of the topic.

To avoid overstating the numbers, we only include food manufacturers and sectors that fit two strict criteria: 1) they use mostly local agricultural inputs; and 2) they are unlikely to exist here without the presence of the associated agricultural sector, i.e., Orange County's abundant supply of fruits and other raw agricultural products.

Based on these strict criteria, we excluded several IMPLAN food and beverage sectors that other studies often include. Adding these sectors could overstate the value of local agriculture, including its employment and multiplier effects. For example, we did not include Orange County's \$874.0 million in bread and bakery products output because the wheat, yeast, salt, and other raw ingredients come from outside the county.

Figure 3 shows the economic effects of locally sourced, value-added processing. As with **Figure 2**, sector names have roots in IMPLAN and NAICS, which lump and split products according to a national classification system for tracking economic output.

Figure 3. Economic Effects of Locally Sourced, Value-Added Processing

Sources: Adapted from IMPLAN and U.S. Bureau of Economic Analysis data, with input from local sources. Columns and rows may not compute exactly due to rounding.

LOCAL PROCESSING	Output Effects (\$ Millions)			TOTAL
	Direct	Indirect	Induced	
Light Processing of Fruit, Vegetable & Nursery Products	\$19.3	\$0.0	\$11.8	\$31.1
Miscellaneous Other Food Manufacturing	\$11.5	\$4.3	\$2.2	\$18.1
Meat & Other Animal Products	\$5.2	\$1.5	\$0.9	\$7.6
TOTAL ECONOMIC OUTPUT:	\$36.1	\$5.9	\$14.8	\$56.7
	Employment Effects (# of Jobs)			TOTAL
	Direct	Indirect	Induced	
TOTAL EMPLOYMENT	411	23	73	507

The largest sector in **Figure 3**, "**Light Processing of Fruit, Vegetable & Nursery Products**," encompasses post-harvest value added to the county's fruits, vegetables, and especially nursery stock. This category captures portions of IMPLAN's "Support Activities for Agriculture" sector that involve the sorting, grading, cleaning, and packing of fresh fruits, vegetables, and other items. The sector also includes IMPLAN's "All Other Food Manufacturing" which reflects fruits and vegetables that are cut, peeled, and turned into perishable foods, including ready-to-use refrigerated products.

The county's \$27.6 million tree fruit & berry crops features prominently in this sector. Before going to the fresh market, many oranges, lemons, avocados, and strawberries undergo post-harvest operations to add value. Depending on the product type, growers might refrigerate the harvested fruit, monitor ethylene to slow ripening and maintain quality, gently wash product to remove field debris and bacteria, and/or grade product based on shape, size, color, and defects. Next, producers might hand-pack products into various container sizes, sometimes including protective materials and breathable packaging to maintain freshness. Last, each package might receive a label identifying its origin. This comprehensive post-harvest processing system transforms fruit into premium, market-ready products that command higher prices than unprocessed items.

Orange County producers add value to their \$37.2 million in nursery stock through multiple ways before plants reach wholesale and retail buyers. Growers of ornamental trees and shrubs increase value by careful pruning, staking, and long-term containerizing so trees are landscape ready in specific sizes and forms. Palm producers specialize in distinct heights and pot sizes, often field growing then boxing trees for premium commercial and resort projects.

Cacti and succulent nurseries create mixed arrangements, color coordinated collections, and branded drought tolerant lines that appeal to homeowners and designers. Producers of liners and potted plants add value by supplying uniform, disease-free starts, seasonal color in decorative containers, and holiday-oriented items such as potted Christmas trees and floral pieces. Across these segments, growers further enhance value through phytosanitary certification for export markets, organic or eco-friendly practices, and consistent grading that meets the needs of high-end landscape, retail garden center, and international buyers.

“Miscellaneous Other Food Manufacturing” in **Figure 3** is a catchall category that combines several NAICS/IMPLAN sectors. Prominent among them is “Canned, Jarred, and Bottled Fruits & Vegetables Manufacturing.” A handful of farms, for example, create small-batch jams, jellies, juices and specialty foods to sell online, at farmers’ markets, and in food stands. A farm in Irvine produces and sells jars of jams (e.g., strawberry, blueberry, apricot), jellies (jalapeno, orange), cranberry chutney, pickled items (e.g., dills, beans, stuffed olives), relishes (e.g., cranberry pepper), and salsas. Another Irvine farm features similar items plus a variety of dried fruits and nuts. A 28-acre farm and community education center in San Juan Capistrano produces jars of jams (strawberry, blackberry, strawberry chili), as well as salad dressing, pesto, and other items. A small farm in San Juan Capistrano produces organic beans, carrots, beets, and other vegetables that are fermented then sold in the owners’ restaurant and retail shop.

The category also includes wineries in Silverado Canyon, Newport Beach, and Trabuco Canyon that produce wine from their own estate-grown grapes. The county’s other wineries typically source grapes from established California wine regions such as Napa, Sonoma, and Santa Barbara—and in one case, from as far away as Italy. They add value through winemaking, blending, and brand experience, but not through locally grown grapes.

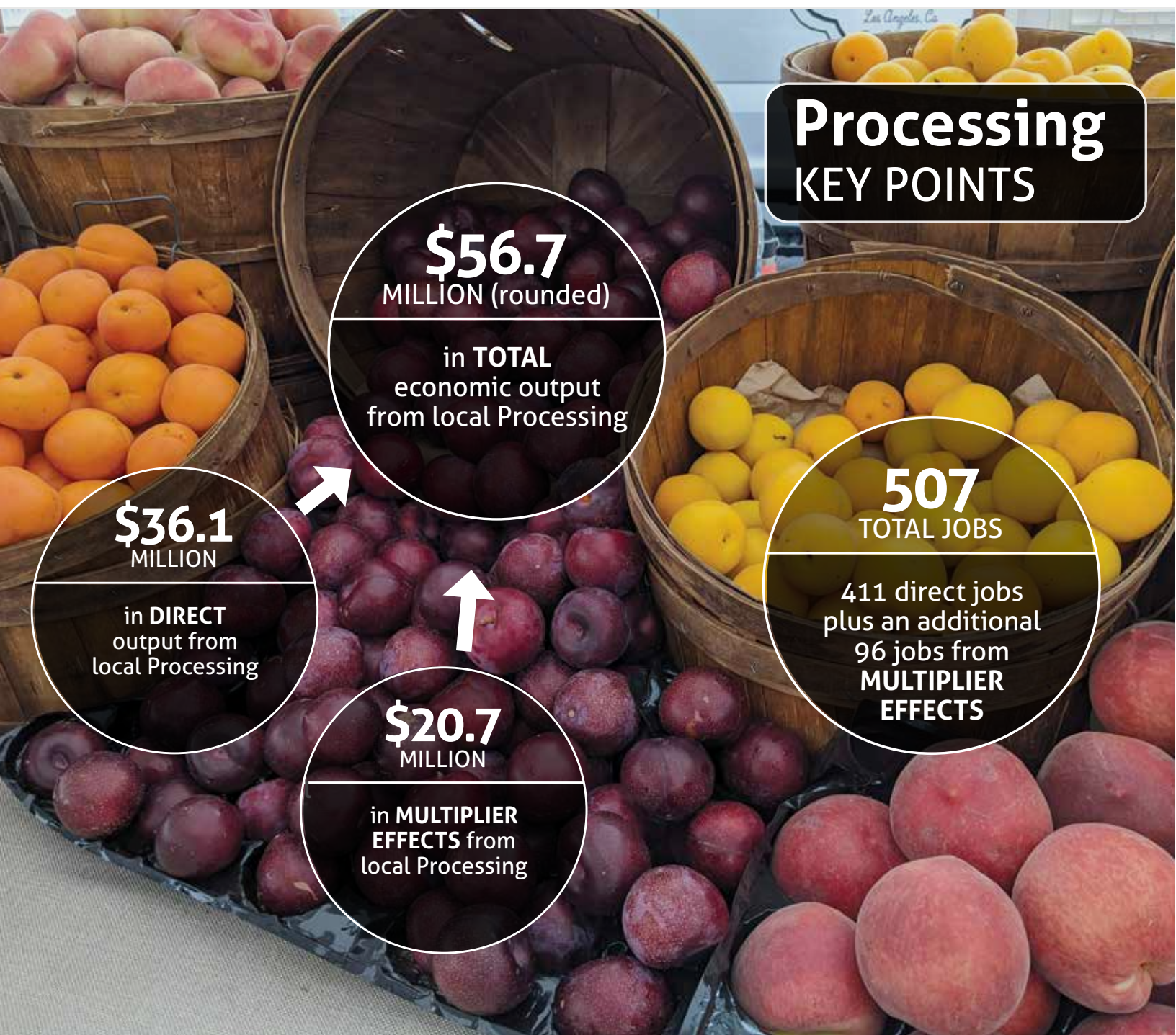
“Meat & Other Animal Products” in **Figure 3** reflects Orange County’s processing of cattle, swine, goats, sheep, rabbits, chickens, and turkeys. The county’s small livestock sector is closely tied to direct sales, seasonal production, and micro-farms rather than to large commodity-scale operations. The annual Orange County Fair in Costa Mesa plays a central role. Local youth—primarily 4H and Future Farmers of America (FFA) members—show market beef, goats, lambs, hogs, turkeys, broilers, ducks, and rabbits in the junior livestock program and then sell the top animals through the Junior Livestock Auction. These sales connect Orange County’s remaining livestock culture to consumers and community buyers, with the auctioned market animals then entering normal meat-processing channels.





Orange County has a modest yet meaningful commercial honey producing sector tied to the county's apiary economy, which includes honey, beeswax, pollen, queen sales, and pollination services. Honey producers add value by turning comb honey into a clean, branded, shelf-ready product. After harvesting frames from the hive, they typically uncap the wax cells, extract the honey, and strain it to remove wax and debris while often keeping it raw and unheated to preserve flavor and pollen. They then bottle and label it by varietal or floral source, which helps differentiate the product for retail customers.

Honey-related activity is direct-to-consumer rather than industrial in scale. A producer in northern Orange County, for example, sells raw varietal honeys such as orange blossom, avocado, sage, and eucalyptus, while a farm-based producer in San Juan Capistrano markets honey collected from bees pollinating crops and nearby wildflowers. Other local sellers emphasize seasonal honeys, tastings, beeswax products, and sales through fairs, farmers' markets, and specialty food channels.



Total Economic Contributions of Orange County Agriculture

The previous sections have provided key pieces to an economic puzzle. This section combines those puzzle pieces into a final picture showing the overall economic effects of Orange County agriculture.

Orange County agriculture’s total 2024 economic contribution was \$178,875,655, rounded to \$178.9 million in **Figure 4**. This consisted of \$109,642,331 in combined direct output from production and processing, plus \$69,233,324 in multiplier effects.

For perspective, agriculture pumped nearly *half a million dollars per day* into the county economy during 2024 (approximately \$490,000).

Total agricultural employment covered in the scope of this study was 1,688. Of these, 1,337 jobs were directly in agricultural production and processing, with the remaining 351 from multiplier effects.

Figure 4. Overall Economic Effects of Orange County Agriculture

Columns and rows may not compute exactly due to rounding.

Type of Effect	Direct	Indirect	Induced	TOTAL
FARM PRODUCTION				
Output Effects (# Dollars)	\$73.6	\$18.9	\$29.6	\$122.1
Employment Effects (# Jobs)	926	108	147	1,181
LOCALLY SOURCED, VALUE-ADDED PROCESSING				
Output Effects (# Dollars)	\$36.1	\$5.9	\$14.8	\$56.7
Employment Effects (# Jobs)	411	23	73	507
TOTAL VALUE OF AGRICULTURAL INDUSTRY				
Output Effects (\$ Millions)	\$109.6	\$24.8	\$44.5	\$178.9
Employment Effects (# Jobs)	1,337	131	220	1,688





How Resilient is Agriculture to Economic Shocks?

We have all heard the old saying “don’t keep all your eggs in one basket.” If the basket drops, then you might lose everything. This section examines that concept and focuses on three questions: 1) Why is economic diversification important? 2) How economically diversified is Orange County agriculture? and 3) How has agriculture’s level of economic diversification trended over time?

Answers to these questions can shed important light on the agricultural industry’s economic resilience, with implications for the wider county economy and beyond.



WHY IS ECONOMIC DIVERSIFICATION IMPORTANT?

Like growers and ranchers everywhere, Orange County’s agricultural producers face a long list of risks. Examples include: wildfires, droughts, floods, pandemics, crop pests and diseases, food safety-related outbreaks, new regulations, new competitors, labor availability and cost, price drops, tariffs and other trade policies, and spikes in costs for fuel, equipment, water and other inputs. Any one of these risks can deal a damaging blow. When combined, they can undermine not just an individual operation but an entire industry.

Take Napa County, for example, where wine grapes account for 99% of the annual agricultural value. When wildfires and a pandemic caused a 51% decline in wine grapes for 2020, the county’s overall agricultural value declined by that same percent. Contrast that with Orange County, where significant agricultural diversification supported a 4.4% rise in agriculture’s overall production value for 2020, plus another 1.8% during the pandemic’s peak in 2021.



HOW DIVERSIFIED IS ORANGE COUNTY AGRICULTURE?

If economic diversification is like an “insurance policy” against risks, then that raises the question: how economically diversified is Orange County agriculture?

To answer this question, we calculated the Shannon-Weaver Index for Orange County agriculture. Created in 1949 for military code breaking, the Shannon-Weaver index is widely used by economists and others interested in quantifying diversification. Different versions of the basic Shannon-Weaver formula exist. What they all have in common, though, is that they quantify not just the number of different items – such as characters in a coded message or crops grown in a county—but also their relative *evenness* or *abundance*.

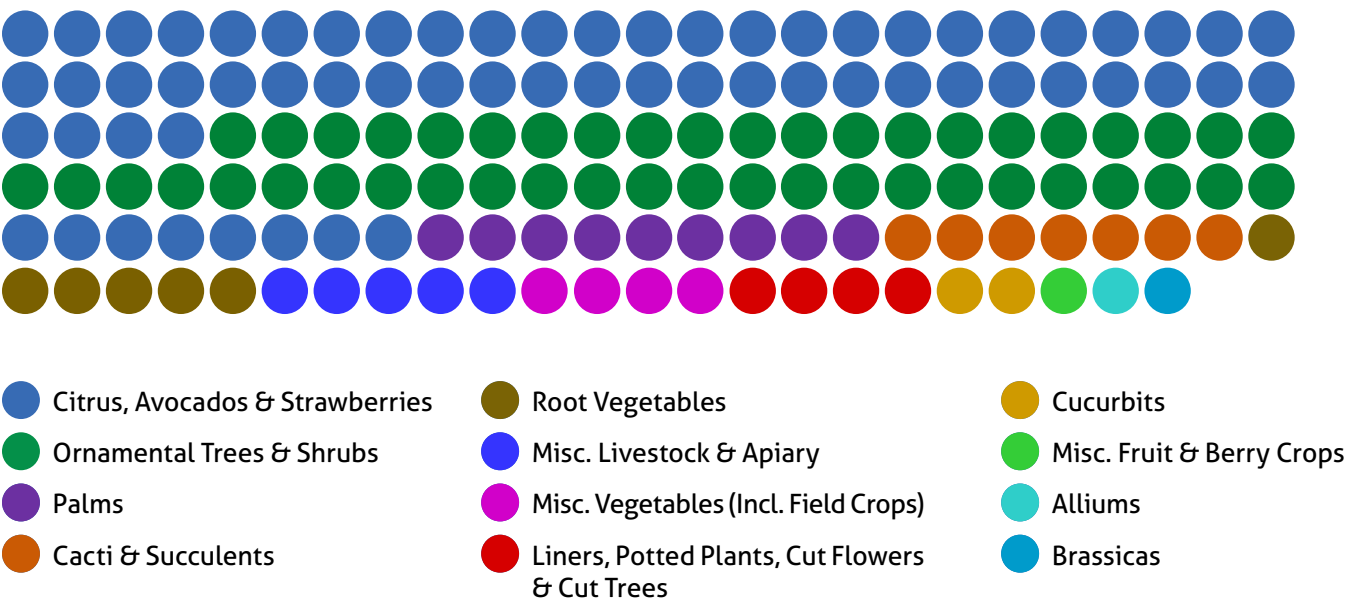


How exactly does one calculate the Shannon-Weaver Index for agriculture? The main steps are: 1) create a list of agricultural products and their production values over the past decade; 2) remove two outlier products, brassicas and alliums, that had an average production value less than one-fourth of one percent (0.25%) of the county’s total; 3) enter the data into the Shannon-Weaver formula; and 4) convert to scale from 0.0 to 1.0. For additional details, please contact the authors.

Over the past decade, Orange County has consistently produced and reported ten major commodities. The relative contribution of each major commodity varied during this period from 0.25% of the county’s total gross production value (the minimum threshold for this analysis) to 53.3% of the county total (ornamental trees & shrubs in 2017). **Figure 5** depicts the most recent relative contributions of all commodities, including the two outliers.

Figure 5. Relative Distribution of Orange County Agricultural Commodities

Each circle below represents approximately \$500,000 in gross sales, and each of the 12 colors represents a unique agricultural commodity specified in the legend, including minor ones. Combined, the circles and colors visually portray agricultural commodities' relative contributions to Orange County's total 2024 gross production value. Commodities less than \$500,000 in value are depicted with a single dot. The number of commodities produced, and their relative evenness, influences the industry's economic diversification score and its resilience to economic shocks. (Source: 2024 Orange County Crop Report)



For 2024, the Shannon-Weaver Index for Orange County's agricultural industry was **0.53**.

What exactly does this number mean? To begin with, getting the highest index, a perfect 1.00 on a scale from 0.00 to 1.00, would require the impossible: produce all seventy-two of California's major commodities and have gross production values equally distributed across them. No single county could accomplish this.

At first glance, Orange County's index of 0.53 seems near the middle of the 0.00 to 1.00 range. But the Shannon-Weaver formula includes a logarithmic function. The logarithm makes the scale exponential, like the Richter Scale that measures earthquakes. Many Californians understand that a magnitude 7.4 earthquake releases twice the energy of a magnitude 7.2 earthquake, even though the numerical difference appears small. The same principle applies here.

The 0.53 index is high compared to typical U.S. counties, many of which focus on a just one or two crops such as corn, soybeans, or wheat. The index is average by California standards, based on the twenty-two counties analyzed thus far. Overall, Orange County's solid economic diversification suggests noteworthy protection from economic shocks.

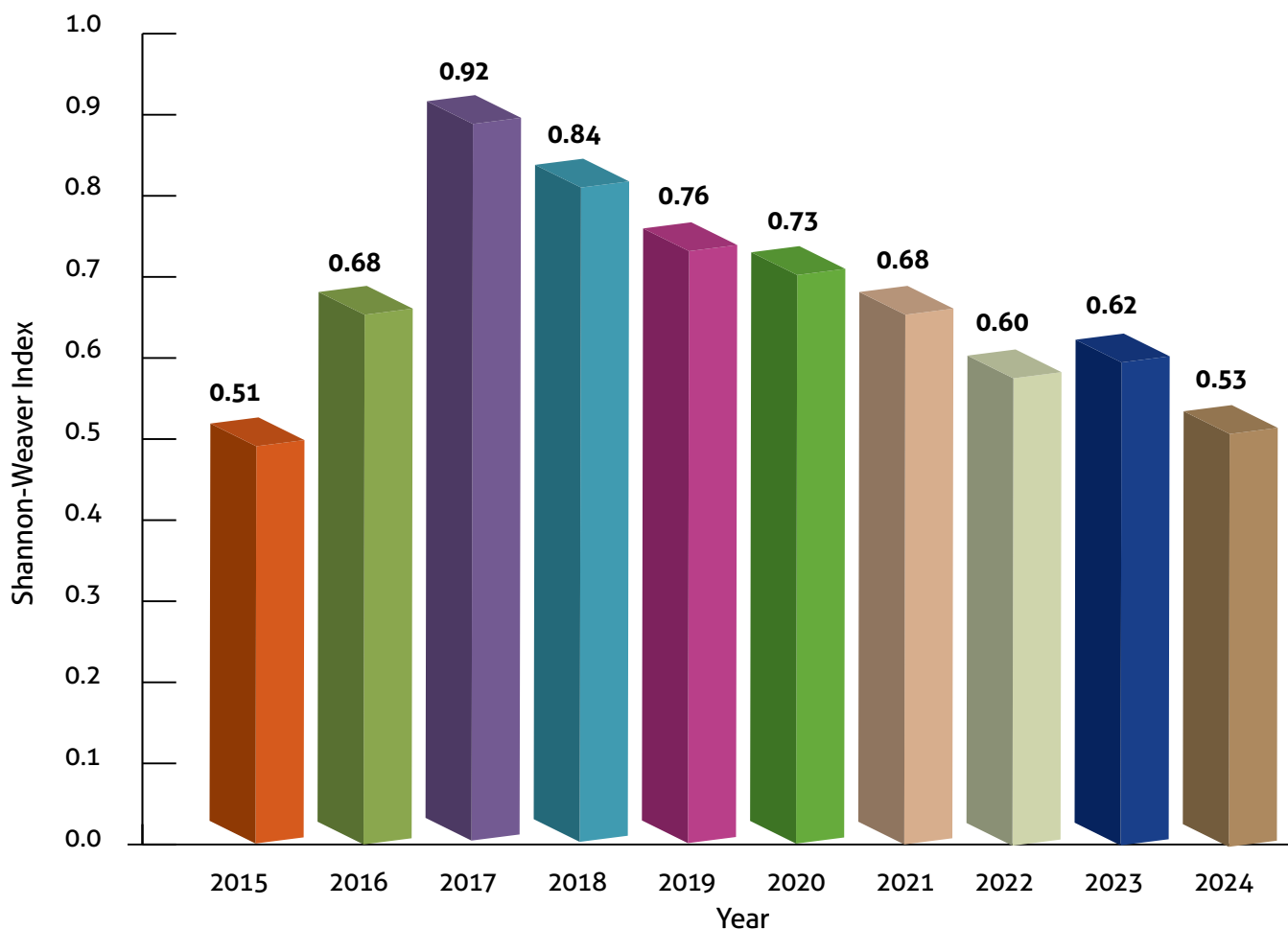
HOW HAS AGRICULTURE'S LEVEL OF ECONOMIC DIVERSIFICATION TRENDED OVER TIME?

Has agriculture become more diversified in Orange County, or less? **Figure 6** shows the Shannon-Weaver Index for the past decade.

The main thing to note is consistently high economic diversification across the years. The index remained at 0.51 or higher over the entire decade, with occasional spikes upward. A downward trend began in 2017, but from a very high starting point. The fact that Orange County's index was higher in 2024 (0.53) than it was ten years earlier (0.51) contrasts with clear downward trends occurring in many California counties that are dependent on one or two major products, often berries, nuts, or wine grapes.

Figure 6. Ten-Year Trend in Orange County Agriculture's Economic Diversification

An indicator of economic resilience, the Shannon-Weaver Index quantifies economic diversification and resilience by combining the number of different commodities produced and their relative economic value.



The COVID-19 pandemic underscored the importance of a strong, diversified agricultural production base. The pandemic disrupted supply chains, farm labor, production costs, exports, prices, and other factors. Many crops went unharvested, and grocery store shelves sat empty across much of the Northern Hemisphere.

Not surprisingly, most Orange County products declined in value when the COVID-19 pandemic hit. Among twelve commodities consistently tracked over the past decade, eight experienced declines for 2020. Examples of decliners include miscellaneous fruit & berry crops (-33.3%), miscellaneous livestock & apiary (-22.1%), miscellaneous vegetables (-15.6%), and palms (-3.1%).

Gains in other areas fully offset these losses. Four commodities increased for 2020, with a 16.0% average gain in value. They included cacti & succulents (+23.0%), citrus, avocados & strawberries (+18.1%), liners, potted plants, cut flowers & cut trees (+16.6%), and ornamental trees & shrubs (+6.5%). Rare among California counties, Orange County's overall production value increased by \$3.9 million (4.4%) for the year, then added another \$1.7 million (1.8%) during the pandemic's peak in 2021.

BOTTOM LINE

The discussion here supports three key points: 1) economic diversification helps buffer against economic shocks such as wildfires, droughts, and even pandemics; 2) Orange County agriculture has significant economic diversification across crops, which likely benefited the industry during the recent COVID-19 pandemic; and 3) agriculture's level of economic diversification has held steady over time, slightly higher in 2024 than it was a decade earlier.

All of this bodes well for the future. In an era of rapid change and rising risks, the agricultural community can take pride and comfort in not having "all of its eggs in one basket."

Toward the Future

This report has documented the role that Orange County agriculture plays in the county economy. The key points are:

- Including local food production, processing, and multiplier effects, agriculture contributed \$178,875,655 to the county economy in 2024 – nearly half a million dollars per day (approximately \$490,000).
- Agriculture also played a vital role in county employment, supporting 1,337 jobs directly in agricultural production and processing, plus another 351 from multiplier effects, for a total of 1,688 jobs.
- With a Shannon-Weaver Index of 0.53, agricultural production has a significant level of economic diversification, which has provided critical stability and resilience to the agricultural industry and to the larger county economy.

Agriculture is an important component of the Orange County economy and represents a vital link to the county's cultural past and competitive future. Agriculture will no doubt face many challenges and opportunities in the coming years. For now, the findings herein provide the most complete view to date of Orange County agriculture's vital economic role.

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