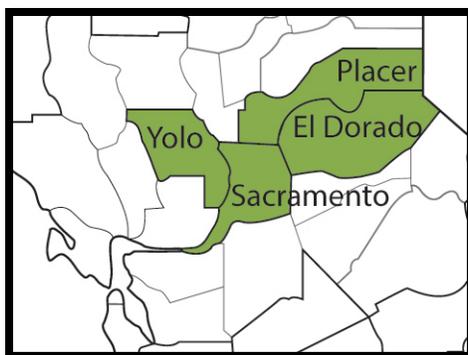




# **Economic Impact of Local Food Marketing by Yolo County Producers in the Sacramento Region**



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# **ECONOMIC IMPACT OF LOCAL FOOD MARKETING BY YOLO COUNTY PRODUCERS IN THE SACRAMENTO REGION**

## **Executive Summary**

Consumers often cite supporting the local economy as a reason why they purchase locally produced foods. To determine the extent of such an impact, our University of California Cooperative Extension team interviewed producers engaged in direct marketing to measure the economic impact of local food marketing in the Sacramento region (El Dorado, Placer, Sacramento and Yolo counties). Our key findings indicate that, for every dollar of sales, Sacramento Region direct marketers are generating 95 percent more economic activity within the region, as compared to producers who are not involved in direct marketing.

- Yolo County direct marketing producers lead the Sacramento Region with average sales were producer of \$474,487. Revenues of producers in the Sacramento Region not engaged in direct marketing averaged \$568,015. The direct marketers rely heavily on markets in the Bay Area, where they generated 77 percent of their revenues. Among the four counties in the Sacramento Region, Yolo County producers generated the highest proportion of sales outside of the region.
- Direct marketers in Yolo County earned 54 percent of their total revenues through wholesale channels and 46 percent through direct marketing. CSAs were their largest direct market channel with 21 percent of total sales, just ahead of farmers markets with 20 percent of total sales.
- Eighty-six percent of the Yolo County direct market producers also sold through wholesale channels. Most of this wholesale activity was in the Bay Area, with distributors having the largest share of sales.
- Yolo County direct market producers' annual production and marketing expenses averaged \$468,308 in 2013. Expenses of the producers in the Sacramento Region not engaged in direct marketing totaled \$214,486, which is less than half that of Yolo County's direct marketers.
- Ninety-one percent of the inputs used by the Yolo County's direct marketers were purchased within the region. Meanwhile, 45% of the inputs used by producers in the

Sacramento Region not engaged in direct marketing were purchased within the region.

- Yolo County direct marketers' output multiplier is 1.82, compared to 1.42 for the region's producers in the Sacramento Region not engaged in direct marketing. This means that direct marketers generate \$0.40 additional output within the Sacramento Region for every dollar of sales, when compared with producers who do not market direct. The greater economic impact of direct market producers is attributed primarily to a larger percentage of their inputs being purchased within the region.
- The total output multiplier of 1.82 is relatively high. Other industries in the region competing for land have multipliers ranging from 1.61 to 1.75 (1.61 for auto dealers, 1.75 for general merchandise retailers).
- Yolo County direct marketers have a job effect of 25.5 compared to 10.5 for the producers in the Sacramento Region not engaged in direct marketing. This means, that for every \$1 million of output they produce, the direct marketers are generating a total of 25.5 jobs within the Sacramento Region, compared to only 10.5 jobs for the producers who do not direct market. The difference is partially due to the fact that hired labor expenses comprised 54 percent of the direct marketers' operating expenses, compared to only 25 percent for the producers who do not direct market.
- We created a scenario in which the five Yolo County school districts increase their purchases of produce grown by the county's direct marketers from the current 16 percent to 30 percent, resulting in an estimated \$97,000 worth of produce purchases. Adjusting for the fact that the school districts purchase the produce from distributors, the County's direct marketers would increase their sales by \$68,000. The resulting net impact is an additional \$124,000 in economic activity within the Sacramento Region.

**ECONOMIC IMPACT OF LOCAL FOOD MARKETING**  
**BY YOLO COUNTY PRODUCERS IN THE SACRAMENTO REGION**

Shermain Hardesty<sup>1</sup> and Libby Christensen<sup>2</sup>

Growing interest in local foods has raised questions about the extent to which local and regional food systems promote regional economic development. Consumers often cite supporting the local economy as a reason why they purchase locally produced foods. To determine the extent of such an impact, our University of California Cooperative Extension team interviewed producers engaged in direct marketing to measure the economic impact of local food marketing in the Sacramento region (El Dorado, Placer, Sacramento and Yolo counties).

We collected economic information through interviews with 88 local farmers and ranchers (referred to as producers) regarding their purchases of inputs such as fuel, packaging materials and labor, services such as insurance and bookkeeping, and the revenues generated from selling their products both direct to consumers and through other channels. We measured their sales and expenses during 2013, both within and outside of the Sacramento Region. In Table 1, we present the overall population of producers involved in direct marketing and response rates to our survey by county.

**Table 1. Survey Responses by County**

County	Survey respondents	Total direct market farmers in county <sup>a</sup>	Response rate
El Dorado	33	126	26%
Placer	17	118	14%
Sacramento	9	95	9%
Yolo	29	95	31%
<b>Total</b>	<b>88</b>	<b>434</b>	<b>20%</b>

<sup>a</sup>Total direct market farmers in the county are the actual number who responded to the USDA-NASS 2012 Census of Agriculture

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We incorporated these data into an economic modeling program to estimate the economic impacts of producers engaged in direct marketing. Additionally, we assessed the qualitative impacts of direct food marketing, for example — those related to increasing consumption of seasonal and high-quality produce, building relationships within the community and creating a sense of place. We examined these impacts by interviewing local organizations, such as leaders of food banks, producer training programs, and regional agricultural marketing organizations. These broader findings are included in the report, *Economic Impact of Local Food Producers in the Sacramento Region* ([http://ucanr.edu/econ\\_impact](http://ucanr.edu/econ_impact)).

## **General Results**

For our economic analysis we limited our interviews to producers in the Sacramento Region who generated at least \$1,000 from marketing direct to consumers<sup>3</sup> during 2013. We measured their sales in different market channels, and also the amount and location of their production expenses. This report relates only to the interviews with 29 Yolo County producers—15 vegetable, 11 fruit and nut, and three livestock.

During 2013, the 29 Yolo County producers averaged \$474,487 in sales, ranging from \$2,141 to \$4,620,000; 15 of them had sales under \$100,000 (which we classify as a “small” farm for this report), six had sales between \$100,000 and \$250,000 (“medium” farm) and eight had sales over \$250,000 (“large” farm.).

According to the 2012 Census of Agriculture, producers in Yolo County generated 56% of the Sacramento Region’s total direct marketing revenues and they averaged \$69,308 of direct marketing revenues—ranking third in the state, behind direct marketers in Merced County and Santa Cruz County.

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<sup>3</sup> We interviewed only producers engaged in direct marketing because they are intentionally involved in marketing some or all of their production within the Sacramento Region. We recognize that some crops grown by producers who sell exclusively through wholesale and/or commodity channels could also end up being marketed locally. However, these producers are not doing this intentionally; therefore, they are not considered to be local food marketers.

Sixty-nine percent farmed full time. A little over half of all Yolo County producers did not have any year-round employees, but these producers hired an average of 2.4 seasonal-employees. The producers that had year-round employees averaged 15.9 year-round employees and 5.8 seasonal employees.

Yolo County direct marketers varied widely in size, from one acre to 500 acres. Fifty-five percent are certified organic farmers while another 20 percent indicated that they were not certified organic but were using organic practices, and 20 percent were conventional producers. There was only one producer who was transitioning to organic. Most operations (76 percent) are structured as sole proprietorships.

Overall, Yolo County direct marketers use a wide range of marketing channels. They earned 46 percent of their total revenues through direct marketing, 54 percent from the wholesale channels, and a small fraction of sales from commodity markets. Individually, the farms generated between 10 percent and 100 percent of their revenues through direct marketing; three of the 29 producers sold only direct to consumers. Farmers markets are traditionally the most popular direct market channel; for Yolo County producers, Community Supported Agriculture programs (CSAs) accounted for 21 percent of total sales, followed closely by farmers markets (20 percent), and on-farm farmstands (5 percent).

Yolo County producers generated 21 percent of their revenues in the Sacramento Region, while 77 percent of their revenues were from sales in the Bay Area and the remainder from other parts of the state or outside of California. The 77 percent was by far the highest proportion of sales outside the immediate region among the four counties. Eight of the 22 producers selling at farmers markets sold only in the Sacramento Region, but in contrast to other direct market producers in the region, the same percent of producers only sold at farmers markets in the Bay Area. The remaining six producers sold at farmers markets in the Sacramento and Bay Area regions. Eighty-six percent of the producers also sold through wholesale channels.

Similar to their direct marketing practices, some producers relied exclusively on Sacramento Region wholesale channel sales while others sold exclusively to Bay Area wholesale channels. In

terms of value, most of the wholesale activity was in the Bay Area, with the largest amount of sales to distributors, followed by direct to retailers, restaurants, other farmers, and processors. Small, medium and large farms sold wholesale; however, wholesale revenues tended to comprise a higher share of total revenues as their total revenues increase.

For Yolo County producers engaged in direct marketing, sales of fresh vegetables generated 46 percent of the total revenues, followed by 39 percent from “all other fruit and nuts” (which excludes apples, pears, wine grapes, and mandarins that account for a large portion of fruit production in counties in the Sacramento Region), and the remaining revenues came from livestock, poultry, agritourism, and processed food products.

Yolo County producers averaged \$468,308 in total operating expenses, ranging from \$2,141 to \$5,000,000. Their average gross margin was \$6,179, which was calculated by subtracting total operating expenses from gross revenues; depreciation, loan interest payments and income taxes were not included as expenses. Their average gross margin rate was 1.3 percent, calculated by dividing the gross margin by total revenues. This was the second lowest for the four country region, with El Dorado County producers having the lowest at -9.2 percent and Placer County having the highest with 25.5 percent. We attribute much of El Dorado County direct marketers’ negative gross margin to the fact that all but one of the 33 producers are small farms.

### **IMPLAN Model**

IMPLAN is a software program that uses input-output (I-O) analysis. It is the most widely used software for economic impact analysis. I-O models measure how sales in one specific industry impact a region’s output value and labor income, based on spending patterns previously established between the industry and other industries in the region. The “region” is a critical factor in the analysis. It can be defined as a county, a cluster of counties, the state, or even a larger geographic area. For this study, we defined the Census Bureau’s four-county Sacramento Metropolitan Area (consisting of El Dorado, Placer, Sacramento and Yolo counties) as the region. Therefore, only expenses and sales made within the region are considered to be local.

There are three levels of economic impact related to local food marketing that we can measure: *direct*, *indirect* and *induced*. To explain these concepts it is useful to consider an example. Imagine a customer goes to the Davis Farmers' Market and spends \$10 on produce. The *direct* effect is the \$10 in revenue for that farmer. Direct effects take place only for the industry immediately affected, which in this analysis are Yolo County producers who sold at least \$1,000 of product direct to consumers.

There are also ripple effects from the \$10 farmers market sale. *Indirect* effects occur when the farmer purchases inputs from other industries within the region to supply her customer with that \$10 worth of produce. For example, the farmer spends \$0.47 on fuel, oil, and grease within the Sacramento Region. When the producers purchase goods and services from suppliers within the region, these local suppliers, in turn, generate demand for additional goods and services within the region. With the example of fuel, oil, and grease, increased demand at the gas station will require the gas station to purchase more gasoline from its supplier. This additional demand is called *indirect* effect; only the demand that is generated locally is counted.

The second ripple effect is called the *induced* effect. It occurs when households spend their income on goods and services within the region. In this example, the producer spends money to hire labor and purchase inputs. Her spending generates income for her farm, her employees, her suppliers and the employees of her suppliers—including that gas station attendant. The *induced effect* occurs when these households spend some of their income on goods and services within the region, such as food, clothing, health care, dining out, recreational activities and other products and services.

### **Using IMPLAN to Assess Economic Impacts**

As part of our analysis of the economic impact of Yolo County direct market producers, we compare their total expenses with that of other producers in the Sacramento Region. These production expenses were aggregated to include only vegetable, fruit, tree nut and livestock operations for the entire four-county region. The expense information for the producers in the Sacramento Region not engaged in direct marketing was accessed through IMPLAN, which derives its estimates from the USDA's Census of Agriculture and the Bureau of Economic

Analysis. For lack of a better term, we refer to producers who do not engage in direct marketing as “nondirect marketers”.

**Table 2. Average Production Expenses and Local Purchasing Ratio by Category<sup>s</sup>**

EXPENSES	Yolo County Direct Marketers			Sacramento Region Nondirect Marketers		
	% local	total (\$)	% of total expenses	% local	total (\$)	% of total expenses
Hired labor	100	254,625	54.4	100	52,739	24.6
Contract labor	100	27,987	6.0	100	11,408	5.3
Fuel, oil, grease	99	21,994	4.7	4	5,586	2.6
Vehicle, equipment and building repairs	95	14,328	3.1	21	2,831	1.1
Machinery hire/commercial trucking	100	4,320	0.9	77	5,193	2.4
Bookkeeping & tax services	100	2,868	0.6	78	237	0.1
Sales, property, excise taxes	100	5,328	1.1	100	9,293	4.3
Real estate rental/lease	93	17,683	3.8	97	1,806	0.8
Insurance	100	7,860	1.7	92	402	0.2
Irrigation and utilities	100.	19,326	4.1	57	1,569	1.0
Fertilizer and soil amendments	76	20,352	4.3	5	784	0.4
Pest and weed control materials	93.	5,713	1.2	9	2,094	0.8
Crop advising services	4	83	0.0	-	-	
Seeds and plants	6	16,675	3.6	-	55,242	25.8
Livestock feeding and bedding	100	6,481	1.4	3	48,883	22.8
Veterinary & medicine	0	293	0.1	69	979	0.57
Breeding	56	61	0.0	-	-	
Processing and other expenses	36	4,195	0.9	-	-	
Certification, inspections, licenses and permits	73	3,569	0.8	-	-	
Marketing costs and services	47	28,575	6.1	78	5	0.0
Office supplies	100	2,448	0.5	71	114	0.1
Other operating expenses	100	3,544	0.8	79	15,321	7.1
<b>Total Expenses</b>	<b>91</b>	<b>468,308</b>		<b>45</b>	<b>214,486</b>	

<sup>a</sup>A dash indicates that information about the particular expenditure category was not easily broken out from existing IMPLAN data.

Yolo County direct market producers’ expenses averaged \$468,308 in 2013 (Table 2). The expense proportions reported in Table 2 are critical data used in IMPLAN to calculate the indirect and induced effects for both production systems. According to IMPLAN, expenses of the nondirect marketers in the Sacramento Region averaged \$214,486, which is less than half

that of Yolo County's direct marketers. Another stark contrast is that 91 percent of the Yolo County direct marketers' expenses were incurred in the Sacramento Region, compared to 45 percent for the nondirect marketers.

Hired labor was the highest expense category for the direct marketers. It averaged \$254,625 and comprised 54 percent of total expenses, compared to 25 percent for the region's nondirect marketers. This labor intensiveness contributes to the significantly higher proportion of inputs sourced locally by Yolo County's direct marketers. The direct marketers' hired labor expenses are likely to include salaries for the farmers of the larger operations. All of the employees resided in the Sacramento Region.

When compared with the region's nondirect marketers, other expense categories also comprised a considerably higher proportion of total expenses for Yolo County's producers; they included marketing costs and services (such as farmers market fees, certifications and packaging), contract labor, fuel, oil and grease, fertilizer and amendments, irrigation and utilities, real estate rental, repairs, certifications, bookkeeping, veterinary expenses, and pest and weed control materials.

Compared to the Yolo County direct marketers, livestock feeding and bedding expenses represented a significantly higher proportion of the Sacramento Region's nondirect marketers' total expenses (23 vs. one percent). This difference is attributable to the fact that livestock operations comprised only 10 percent of the direct marketers in our sample of Yolo County direct marketers, compared to 44 percent of the nondirect marketers in the Sacramento Region.

### **IMPLAN Results**

Using IMPLAN, we estimated a total output multiplier of 1.82 for Yolo County's producers engaged in direct marketing. This implies that every dollar of sales generated by these producers also created an additional \$0.82 of output in the Sacramento Region. It includes \$0.34 of indirect effect, from the additional demand for inputs from other industry sectors. It also includes \$0.48 of consumer goods and services purchased (induced effect), which is generated by household spending within the Sacramento Region by the direct marketers, their employees and their

suppliers' owners and employees. Both the indirect effect and induced effect involve only purchases made within the Sacramento Region.

According to IMPLAN, the Sacramento Region nondirect marketers have a smaller output multiplier of 1.42, consisting of an indirect effect of \$0.09 of additional input purchases and an induced effect of \$0.33 of additional household spending in the Sacramento Region. Therefore, each additional dollar of sales generated by a Yolo County direct marketer creates \$0.40 more economic activity in the Sacramento Region, when compared with an additional dollar of sales generated by a Sacramento Region producer who is not involved in direct marketing. The higher economic impact of the direct marketer is due primarily to their extensive purchasing of inputs within the region (91 percent), compared to the 45 percent local purchasing rate for inputs by the nondirect producers.

The following example illustrates the implications of the differences between the direct marketers' total output multiplier with that of the nondirect marketers. Assume that Farmer Green, a Yolo County farmer, had sales totaling \$200,000 in 2013; she generated 80 percent of her sales at farmers markets, and 20 percent selling to restaurants. Applying the 1.82 multiplier, her \$200,000 of production generated \$364,000 of economic activity in the Sacramento Region. Meanwhile, her neighbor, Farmer Brown does no direct marketing; she sells all of her crops to a produce distributor for \$200,000 in 2013. Applying the 1.42 total output multiplier, Farmer Brown's production generated \$284,000 of economic activity in the Sacramento Region. The economic activity generated by Farmer Green is \$80,000 greater than that generated by Farmer Brown.

There are also large differences in the job effect IMPLAN generates for the two producer groups. The Yolo County direct marketers have a job effect of 25.5; this means that for every \$1 million of output produced by the direct marketers they are generating a total of 25.5 jobs within the Sacramento Region. These jobs include on-farm labor, as well as jobs related to the farms' indirect effects, which involve the farms' suppliers, and jobs created by the direct marketers' induced effects involving household expenditures. The Sacramento Region nondirect marketers have a job effect of 10.5. The difference is partially due to the fact that hired labor expenses

comprised 54 percent of the direct marketers' operating expenses, compared to only 25 percent for the nondirect marketers.

Another important difference between these two producer groups is related to their gross margin, which is used to cover the producers' depreciation and loan interest expenses, income taxes and profit. In Yolo County, only 1.3 percent (\$6,179) of the revenues generated by the direct marketing producers remain in their pockets beyond the wages they potentially paid themselves, compared to 62.2 percent (\$353,529) for the Sacramento Region's nondirect marketers. Since the nondirect marketers tend to have larger operations, their depreciation and loan interest expenses and income taxes are likely to be higher, as well as their profit levels. According to economic theory, the proportion of disposable income spent by households decreases as disposable income increases; the rest goes into savings. Therefore, the profits generated by higher income producers (nondirect marketers in this case) do not circulate in the local economy to the same extent as money paid to a wage worker or producer with less disposable income (direct marketers). This decreases the induced effect and the overall economic impact of the nondirect marketers' production system in the Sacramento Region. However, the direct marketers' considerably higher rate of purchasing inputs locally also contributes to their higher output multiplier.

While supporting the local economy is often cited by consumers as a primary reason for buying locally grown foods, only two other economic impact studies in the United States are known of that also used data collected from producers engaged in direct marketing. The differences between the output multipliers for direct and nondirect marketers in these studies were not as large as that in our study, but values of their direct marketers' output multipliers were similar to ours. One study was conducted in upstate New York by Schmit et al. (2013). Their total output multipliers were 1.87 for small-scale direct marketers and 1.94 for not small-scale direct marketers, compared to 1.90 for the nondirect marketers. The other study involved producers throughout the state of New York marketing through a food hub (a business that aggregates and distributes local food) with a 1.75 output multiplier, compared to the nondirect marketers with a 1.68 output multiplier (Jablonski et al. 2016). Yolo County direct marketers' total output multiplier of 1.82 is relatively high (Table 3). IMPLAN's total output multipliers in the four county region range from 2.91 associated with local government passenger transit to a low of 1.0. Various nonresidential construction sectors have multipliers ranging from 1.50 to 1.66,

while single-family residential has a 1.71 multiplier. Other industries in the region competing for land have multipliers ranging from 1.61 (auto dealers) to 1.77 (building material/garden supply retailers).

**Table 3. Total Output Multipliers in the Sacramento Region for Selected Industries, 2013**

<b>Industry</b>	<b>Multiplier</b>
Farming-vegetable, fruit, nuts and livestock--direct market, Yolo County	1.82
Restaurants-full service	1.76
Retail-building materials/garden supplies	1.77
Retail-general merchandise	1.75
Construction-single family	1.71
Hotels and motels	1.70
Construction-various nonresidential	1.50-1.66
Restaurants-limited service	1.61
Farming-vegetable, fruit, nuts and livestock-- nondirect market	1.42

Thus, an additional sales dollar generated by a direct marketer creates a larger economic ripple effect when compared to other industries that are often identified as key to regional economic development and that compete with agriculture for land, such as new housing developments and big box stores. But, on a per acre basis, the direct marketers' higher multiplier effect is offset by the "big box" retailers' higher revenues. Walmart stores (fitting the retail-general merchandise category in Table 3) have annual sales averaging about \$400 per square foot of store space. However, this square foot measure is misleading because the stores need large parking lots. Currently, there is a 155,000 square foot Walmart store planned in Auburn on an 18.6 acre parcel. Since there are 43,560 square feet per acre, a 155,000 square foot store produces approximately \$62 million in sales annually. The store averages \$3.33 million per acre, which is still considerably higher annual revenues than any farm is likely to produce (of legal crops!)

On the other hand, many residents believe that farmland is more esthetically pleasing than a Walmart store and its parking lot. We can also cite the qualitative benefits of direct marketing that are reviewed in our report for the entire Sacramento Region. When speaking of local economic benefits and examples, interviewees said that the local food system creates

connections by building social networks and relationships and building a sense of place. This “place making” was every bit as important to interviewees as the additional dollars generated in the economy.

One additional quantitative effect is that the 1.82 total output multiplier does not capture all of the economic activity generated by Yolo County’s direct marketers. In particular, researchers in Oregon have found that farmers market customers also shop at other businesses during their visit downtown to the farmers market. The proportion of customers spending outside of a farmers market to inside of a farmers market ranged from .31 to .92 based on customer surveys at five Oregonian farmers markets. Of the 4,200 farmers market shoppers in Kirkland, Washington surveyed by Washington State University, 57 percent came downtown primarily for the farmers’ market, and spent an average of \$13.47 at the farmers market and \$16.03 at downtown businesses. Similar results were obtained for farmers market shoppers in New Orleans, Wisconsin and Idaho. In a study of three farmers markets in three cities (Baltimore, Cleveland, and Los Angeles), the estimated annual economic impact of the farmers market on nearby businesses ranged from \$19,900 to more than \$1,000,000 per market. No such studies are known to have been conducted in Northern California. However, we can conclude that the 1.82 multiplier understates the economic activity in the Sacramento Region generated by Yolo County direct marketers.

Readers should be cautioned that these results, the multipliers and other economic impacts that were estimated only apply to Yolo County and the Sacramento Region. Other regions would need to conduct their own survey of their direct marketing producers to determine their expense proportions and local sourcing purchasing practices, and use these data when running their IMPLAN models.

### **Looking Into the Future**

The Farm to School Program in Yolo County is one of the nation’s leading examples of innovative cross-school district efforts to connect local producers with local school children. To illustrate the potential impacts of an investment in direct market agriculture, we tested a Farm to School Program scenario. There are five school districts within Yolo County.

Starting in the 2012-2013 school year, the districts have been working closely with program evaluator Gail Feenstra from UC Davis' Agricultural Sustainability Institute (and member of this project team). She and her team have collected detailed information about each school district's produce purchases. Over the last four years, the school districts have increasingly shifted away from purchasing directly from local direct market producers to working with produce distributors to source locally grown produce. During the 2014-2015 school year, we estimated that the five Yolo County school districts spent \$674,000 on fresh produce and that \$105,000 (16 percent) was spent on produce grown by direct market producers within the four-county region.

In this scenario, we modeled the economic impact of increasing the districts' annual purchases of produce grown by local direct market producers from 16 percent to 30 percent; this would be a shift in purchases by all of the schools districts in the region totaling \$97,000-- from nonlocally grown produce to produce grown in Yolo County. We used the current expense ratios and purchasing practices of Yolo County's direct market producers displayed in Table 2 to measure the impact of the increased demand for local produce by the school districts.

Because the school districts are purchasing increasing amounts of local produce through distributors, we assumed that the \$97,000 increase in produce grown by direct market producers would be purchased through distributors. Using the standard industry margin of 30 percent to cover the distributors' operations and service fees, the increased purchases by the school districts would generate \$68,000 of additional sales for the Sacramento Region's direct market producers. These sales would displace existing non-local purchases by the school districts. Since these existing purchases go through the same distributors, there would be no impact to their bottom line. Since the other growers from whom the distributors are purchasing from are outside of the Sacramento Region, there are no negative impacts to the nondirect growers in the Sacramento Region.

As a result of the high multiplier for direct market agriculture, the influx of \$68,000 in sales to direct market producers would result in an additional \$124,000 circulating in the Sacramento Region and 1.8 new jobs. This total effect is a combination of direct, indirect, and induced

effects. The indirect effect is \$23,000 and 0.2 jobs, and the induced effect is \$33,000 and 0.3 jobs.

## **Conclusions**

The two groups of producers, Yolo County direct marketers and Sacramento Region nondirect marketers, are clearly very different. Those who are engaged in direct marketing tend to be smaller, more labor-intensive and source more of their inputs locally.

As is the case throughout the Sacramento Region, the direct market producers in Yolo County are a small segment of the total agricultural sector; they only account for 13 percent of the county's farms and four percent of its agricultural production. However, when the sums of the indirect and induced effects for the two producer groups are compared, Yolo County direct marketers generate a 95 percent greater economic impact on the Sacramento Region's economy for every dollar of product they sell. Furthermore, the direct marketers' 1.82 output multiplier does not reflect the incidental additional economic impact created when farmers market customers shop at nearby businesses during their visit downtown to the farmers market.

This analysis assesses the impact that Yolo County producers who are engaged in direct marketing have on the region's economy. For every dollar of product that they sell, their 1.82 output multiplier generates ripple effects on the Sacramento Region's economy that are 95 percent higher than that of the nondirect marketers' 1.42 output multiplier. We recognize that direct marketers comprise a relatively small part of Yolo County's agricultural sector. Nevertheless, they do generate both economic and qualitative benefits for the Sacramento Region, and warrant policymakers' support to nurture their growth.

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*The cover photo of the Fiddler's Green Farm stall was taken by Libby Christensen at the Davis Farmers Market.*

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