

The Economics of Going Local:

Oliver's Market

August 2020



Economic Forensics and Analytics

Petaluma, CA 94975

eyler@econforensics.com

[@bobby7007](#)

Executive Summary

This study uses Oliver’s Market as a case study in local buying behavior by grocers/retailers. By sourcing locally, hiring locally and being locally-owned, Oliver’s creates larger economic impacts on other businesses throughout Sonoma County than other grocers/retailers of similar size that source more from vendors outside Sonoma County. When grocers/retailers are not owned locally, but sell locally-sourced goods, the positive economic effects are still less than Oliver's selling the same goods as retained earnings are not distributed locally. Oliver’s provided the authors purchasing data from 2019 that showed that 29.6 percent of Oliver’s cost of goods sold in its four stores was paid to local producers. “Local” in this study means Sonoma County. This report compares the economic impacts of such purchasing behavior to a hypothetical, non-locally owned grocer/retailer assumed to source only 18.4 percent of its cost of goods sold locally (average local sourcing in California according to Bureau of Economic Analysis and IMPLAN®); Oliver’s hired 734 full-time equivalent workers in 2019 and through its use of revenues supported 323 more workers employed at various employers in Sonoma County.

Oliver’s generates over 68 percent more local economic impacts in business revenues (and about 61 percent more jobs) than the non-local grocer/retailer example. This difference implies that for every \$100 spent at Oliver’s, there are \$186 of economic impacts created for the Sonoma County economy; \$19.60 of that \$186 is paid as state and local taxes. When buying the same goods at a national or regional chain with 18.4 percent local, the same \$100 bag of groceries only circulates \$116 in Sonoma County. When stores source fewer goods locally than 18.4 percent, that \$100 bag of groceries loses \$2.73 in what is retained locally for each percentage point less locally-sourced than Oliver’s. Table EX-1 shows the summary estimates and also includes an extreme example of Oliver’s versus a store that sells no local goods (0 percent local sourcing).

Table EX-1: Summary Effects of Local Buying Behavior by Oliver’s Market

\$100 sold at Oliver's sourcing 29.6% local vs. \$100 of same goods by a non-local Grocer sourcing 18.4% local	At Oliver's	At Non-local	% Difference
Additional Business Revenue Generated (includes taxes paid)	\$186	\$116	60%
\$100 sold at Oliver's sourcing 29.6% local vs. \$100 of same goods sold by a non-local Grocer sourced 100% from non-local sources	At Oliver's	At Non-local	% Difference
Additional Business Revenue Generated (includes taxes paid)	\$186	\$66	182%

1. Introduction

This is the first of five sections in this report. This study used 2019 data about Oliver's Market (Oliver's) to update a 2015 study to examine the economic impacts of Oliver's regional purchasing strategies in Sonoma County, California. A regional purchasing strategy, in essence, connects links in supply chains locally and reduces the amount of income "leakage" that happens when grocers and retailers source the goods they sell from vendors outside the local area. By sourcing and thus circulating more income locally when possible, grocers/retailers like Oliver's create larger, local "multiplier" effects from their sales versus sourcing from outside the area. In these ways, Oliver's local buying strategy directly affects its customers, neighbors and communities. Being locally-owned helps also; profits are distributed to local residents as additional income.

Grocers and retailers also add value locally when they purchase less from local vendors or are not locally-owned, but not as much for the local economy as do those grocers/retailers that are locally-headquartered and owned. National-level distribution and manufacturing provide scale and lower prices for customers; businesses can profit from that scale by locating in several locations at the cost of creating leakages from the economy where they locate stores. The preservation of local grocers, and households remaining loyal patrons for such grocers, may be more important than ever; in 2020, COVID-19 created an initial shift of household purchases to a mix of home delivery and classic grocery trips.

This report is structured as follows from here. Section 2 looks at the economics of local sourcing by grocers/retailers. Reducing leakages from sourcing elsewhere link local sellers and buyers. Section 3 describes economic impacts and the multiplier effect. Section 4 uses Oliver's Market and their 2019 data for a simple analysis of buying and selling local.¹ Sonoma County is the "local area". The economic impact estimates for two types of businesses are shown in detail: (1) Oliver's; and (2) a non-locally owned grocer/retailer with 18.4 percent of its cost of goods sold paid to local producers. Section 5 provides a summary of Oliver's effects on the local economy and how such buying behavior generates a larger economic effect than buying outside Sonoma County.

¹ Oliver's provided EFA data on its employee levels, sales volumes and cost of goods sold by local (in Sonoma County) versus non-local (all other places). The use of the word "foreign" in this study refers to outside Sonoma County.

2. Some Simple Economic Ideas: Sourcing Locally

Economics is fundamentally the study of incentives affecting human and business behavior. Customers buying from local businesses versus the lowest-priced goods and services offered otherwise happens because incentives change to do so.² Advocates of “go-local” strategies suggest that consumers create positive, local economic effects when they shop, which act as further incentives to shop locally; grocers/retailers can support a wide array of local businesses through buying from locally-owned businesses. Low prices available at national chains that source goods globally and sell in local retail outlets have competitive advantages over smaller, regional businesses including grocers. Offering goods at a lower price sourced elsewhere can reduce go-local incentives and undermine the potential, positive economic impacts from supporting local businesses.

To measure Oliver’s economic impacts, we need to focus our analysis of economic activity within a defined, “local” area. We use Sonoma County as that area here. In grocery and retail sales, there is such a wide array of goods that it is virtually impossible to source 100 percent of goods sold locally as stores try to provide for any customer’s needs; however, by shifting to local sourcing when possible, more of the economic benefits derived from grocers/retailers are retained locally.

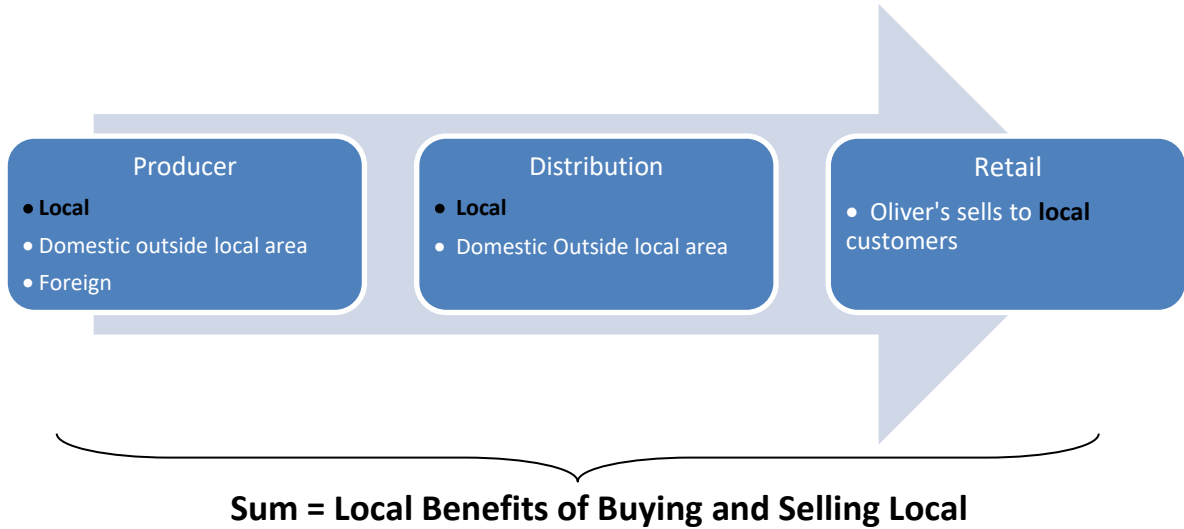
When local residents have a choice and buy goods originating outside Sonoma County, this is a choice **not** to buy a local product by our area’s definition, creating lost income or **leakages**. Leakages are a shift of business and wage incomes, jobs and tax revenues for local government from the local area to some other place. The local retailer retains some economic benefits, but not as much as when retailers are selling and local consumers are buying locally-produced goods.

Figure 1 provides a simple diagram for how Oliver’s buys locally and then sells locally, reducing such leakages. Each link has different possibilities, but connecting “Local” to “Local” to “Local” maximizes the local area’s potential benefits relative to other places. A simple example is a local farmer growing vegetables and selling them directly to a local grocer, which then sells the vegetables to local residents. Grocers like Oliver’s may also act as a distributor for other businesses; a local chef may purchase vegetables, fruit, bread, and other “inputs” from Oliver’s due to the breadth of local products in one, convenient place. Each link in Figure 1’s chain that originates in Sonoma County

² See Dunne, et al. (2010) for more, as well as Printezis and Grebitus (2018).

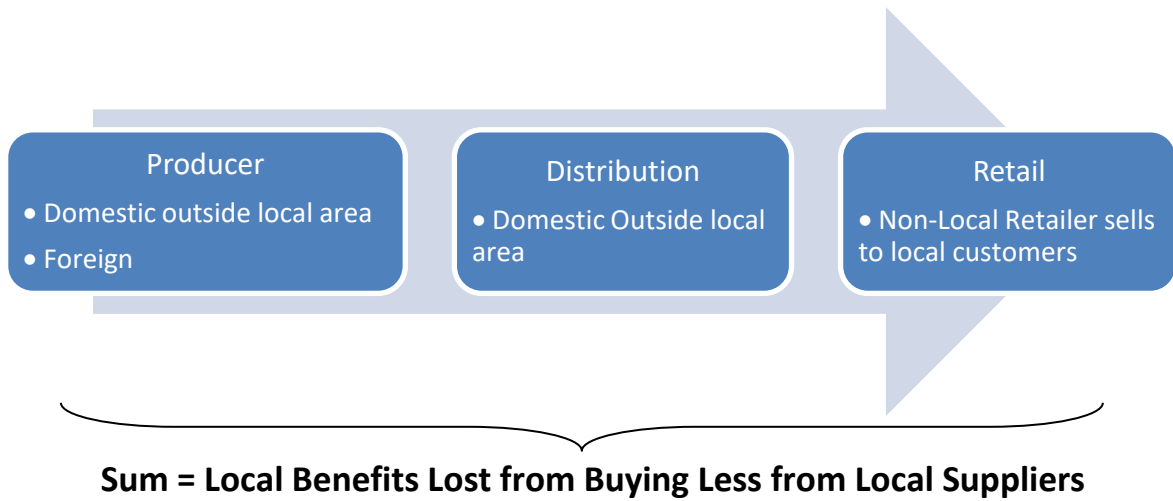
circulates more business revenue, supports more local jobs, and generates more tax revenues and profits locally.

Figure 1: Oliver’s Supply Chain and Local Buying Opportunities



Further, as Oliver’s business grows (since this last edition of this study, Oliver’s has opened another location in Windsor, CA), and the purchasing of local goods expands in volume, the regional economic effects grow. Oliver’s paid 29.6 percent of its cost of goods sold to producers within Sonoma County in 2019; in 2015, that percentage was 27.4 percent. Oliver’s had \$104 million in sales in 2015; that level is now \$182.6 million in Sonoma County. With larger revenue levels based on growth, the local economic effects expand also in terms of dollars. Leakages are the number-one challenge to these economic impacts. Figure 2 shows how leakages are created due to more foreign sourcing substituting for local goods; the economic benefits of local retail activity shrink from what they could be. The leakages are more pronounced when the retailer is also not locally-owned.

Figure 2: Leakages from Purchases Outside the Local Area by Non-Local Retailer

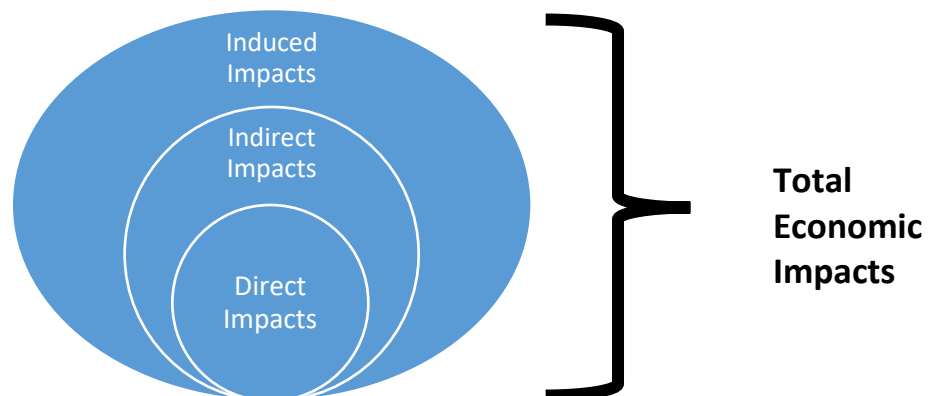


The next two sections provide more detail on the economic multiplier effect and how Oliver's enhances local economic impacts versus grocers with lower levels of local sourcing.

3. The Economic Multiplier Concept

Figure 3 shows the multiplier effect for any business in theory. Economic impacts come in three “waves”: **direct; indirect; and induced**. Oliver’s level of sales and subsequent employment levels begin the process in Figure 3 as the **direct** impacts. Oliver’s spending on vendors, its employees and on growing its business generate more jobs and incomes in Sonoma County due to these direct impacts.

Figure 3: Economic Impacts in Theory



Indirect impacts come from the grocer/retailer's vendor relationships becoming broader spending, as does how the grocer/retailer's workers spend their wages. For example, when a newly-hired grocery clerk at Oliver's goes out to eat at a restaurant in Santa Rosa, there are indirect effects from Oliver's operations; the affected restaurant uses a larger amount of a local linen cleaner's services than before, which creates indirect effects from the grocery clerk being hired. These additional jobs and revenues create **induced** impacts that come from indirectly-affected workers and firms spending on an array of local businesses. For example, a new linen-service worker, hired due to the restaurant's additional income described above, may go to clothing stores, auto repair, the doctor's office, and hundreds of other local businesses more often, which induces further growth in retail sales, employment and taxes. These effects in sum are the total or overall economic impacts.

Oliver's sales revenues generate their local economic impacts; local workers (wages and salaries), local goods vendors (cost of goods sold), other expenses (including additional local vendors, but also including non-local vendors for goods and services), and profits for the business all come from sales revenues. The next section uses Oliver's 2019 data to estimate its effects on Sonoma County, compared to similar-sized grocers/retailers that source a smaller percentage of good sold from local businesses.

4. How Oliver's Affects the Local Economy

Oliver's affects the local economy by providing revenue to local businesses, workers and governments from their sales revenue. Additionally, being locally-owned retains profits from those sales within Sonoma County. How Oliver's does this versus a non-locally owned grocer/retailer can be seen initially from a simple, extreme example using the basic ideas from Section 3.

The table below shows two different grocery stores and someone buying the same amount of groceries (\$100), one store locally-sourced and the other store not locally sourced. The grocery store that sells locally-sourced goods keep the economic benefits in the local area along the supply chain in Figure 1. The grocery that sells fewer locally-sourced goods generates lower levels of supports for the local economy. To make it simple, we consider \$100 worth of groceries purchased at each store, and four major uses of the \$100 of revenue: (1) cost of goods sold (COGS); (2) employee wages; (3) costs

of operations otherwise; and (4) profits for owners. Each use provides two effects: a direct effect and then additional economic impacts (indirect + induced).

Notice in the example below there are small, local impacts from COGS or profits due to non-local sourcing and non-local ownership. For the local grocer, \$100 of locally-sourced goods creates another \$48 of additional, **local** impacts. For the non-local grocer, the same \$100 of goods only creates \$16 of additional impacts locally. For the local grocer, the \$70 of COGS is also retained locally, as are the profits of \$10 due to local ownership. For the non-locally owned and non-locally sourced grocer, the COGS and profits are further **leakages** from the local area, reducing the additional impacts to just \$16 versus \$48. In summary, from the example \$100 bag of groceries described above:

1. \$48 of additional economic benefits are created in the local area for the local grocer
 - o \$100 from the four uses becomes \$48 in additional impacts; and
2. \$16 of additional economic benefits are created in the local area for the non-local grocer;
 - o \$16 remain locally from the four uses of the \$100 of revenue, where the use of local distribution and storage provide small but positive, local benefits from COGS.

Example: \$100 of the same goods, 100% Local vs 100% Non-Local

Local Owned and Sourced Grocery		Non-Locally Owned and Sourced Grocery	
Uses of Revenue	Additional Local Economic Impacts	Uses of Revenue	Additional Local Economic Impacts
COGS = \$70	\$30	COGS = \$70	\$3
Wages = \$10	\$5	Wages = \$10	\$5
Other Operations = \$5	\$8	Other Operations = \$5	\$8
Profits = \$10	\$5	Profits = \$10	\$0
Total = \$100	Total = \$48	Total = \$100	Total = \$16

Note: These numbers are examples, below we look at Oliver’s data directly as a case of local economic support.

Grocers generally have a mix of local and “foreign” purchases of goods sold regardless of being locally-owned or not, but the extreme example above outlines two key ideas:

1. Sourcing local goods for sale keeps more dollars in the local area; and
2. There are some parts of non-local businesses that remain local, such as workers.

The example here is extreme, but points to the power of local sourcing. Let’s now see how Oliver’s reduces leakages from local economic impacts using actual 2019 data versus a non-locally owned grocer/retailer that has a smaller percentage of cost of goods sold locally than Oliver’s.

Going Local as a Grocer/Retailer

Table 1 shows the amount of sales in 2019 dedicated to local producers (in Sonoma County), local workers and earnings retained locally from the \$182.6 million in sales for Oliver’s. Table 1’s data represent the direct impacts of Oliver’s on the Sonoma County economy based on local sourcing and hiring and ownership (retained earnings).

Table 1: Purchases from Local Producers and Retained Earnings, 2019, Oliver’s Markets

<u>Locally Sourced, Workers</u>	<u>Totals</u>
Deli	\$9,904,467
Natural Grocery	\$5,039,841
Spirits/Wine/Beer	\$4,594,940
Meat	\$4,195,694
General Grocery	\$3,748,249
Bakery	\$2,737,326
Produce and Other Items Sourced Locally	\$840,024
Wages + Retained Earnings	\$54,525,222
Total Local	\$85,585,763

Of the total sales in 2019, **\$85,585,763** was spent on local workers and vendors. This amount begins our analysis of how Oliver’s make a difference in Sonoma County. The \$85,585,763 that Oliver’s spends locally becomes \$158 million in overall, estimated economic impacts as shown in Table 2. The process described in Section 3 above is estimated in Tables 2 through 4: **direct impacts** create those ripple effects (**indirect and induced impacts**) on other businesses and workers.

Table 2: Business Revenue Created/Sustained by Oliver’s Local Purchases

<u>Industry</u>	<u>Direct</u>	<u>Indirect</u>	<u>Induced</u>	<u>Total Oliver’s</u>
Oliver’s Market	\$85,585,800	\$-	\$-	\$85,585,800
Other real estate	\$-	\$6,482,000	\$2,105,500	\$8,587,500
Owner-occupied dwellings	\$-	\$-	\$8,916,300	\$8,916,300
Hospitals	\$-	\$-	\$2,529,700	\$2,529,700
Tenant-occupied housing	\$-	\$-	\$1,873,000	\$1,873,000
Full-service restaurants	\$-	\$216,000	\$1,598,100	\$1,814,100
Other local government enterprises	\$-	\$545,000	\$1,101,300	\$1,646,300
Banks and Credit Unions	\$-	\$474,200	\$1,032,900	\$1,507,100
Offices of physicians	\$-	\$-	\$1,479,000	\$1,479,000
Electric power transmission and distribution	\$-	\$910,300	\$324,100	\$1,234,400
Warehousing and storage	\$-	\$1,107,500	\$71,500	\$1,179,000
Limited-service restaurants	\$-	\$58,900	\$1,227,000	\$1,285,900
All Others	\$-	\$11,993,200	\$28,753,900	\$40,747,100
Totals	\$85,585,800	\$21,787,100	\$51,012,300	\$158,385,200

The largest revenue gains are in those industries that receive direct payments, except for cattle ranching and wholesale trade. As an industry, cattle ranches are not directly related to Oliver’s purchases. The process that delivers fresh, local meats to Oliver’s is directly related. Oliver's buying behavior retains these gains for Sonoma County annually.

Table 3: Jobs Created/Sustained by Oliver’s Local Purchases

Industry	Direct	Indirect	Induced	Total Oliver’s
Oliver’s Market and Other Grocery	734.0	-	-	734.0
Other real estate	-	21.2	6.9	28.1
Full-service restaurants	-	2.0	14.9	16.9
Limited-service restaurants	-	0.5	9.9	10.4
All other food and drinking places	-	2.7	6.8	9.5
Individual and family services	-	-	9.7	9.7
Services to buildings	-	5.8	2.4	8.2
Hospitals	-	-	8.1	8.1
Employment services	-	3.6	3.5	7.1
Warehousing and storage	-	6.0	0.4	6.4
Accounting, tax preparation, bookkeeping, and payroll services	-	3.5	2.2	5.7
Automotive repair and maintenance, except car washes	-	1.4	4.6	6.0
All Others	-	48.3	159.5	207.8
Totals	734.0	95.0	228.9	1,057.9

Oliver’s purchases also provide tax revenue for all levels of government. The state and local taxes generated, mainly income, sales and property, are due to retail sales and the ownership of homes and commercial spaces. Table 4 shows these data: for every \$100 of revenue generated by Oliver’s buying and selling local goods, state and local taxes increase by \$19.60.

Table 4: Tax Revenues Created/Sustained by Oliver’s Local Purchases

Tax Category	Oliver’s
Employment Taxes	\$434,600
Sales taxes	\$5,832,300
Property Tax: Commercial	\$6,127,500
Property Tax: Residential	\$128,200
Personal Income	\$3,156,900
Other Taxes and Fees	\$1,277,000
Total State and Local Taxes	\$16,956,500

We assume that Oliver's retains a portion of its overall sales as margin for its owners; that value is assumed to be 5.8 percent of sales in the analysis here. Because Oliver's is locally headquartered, its owners in Sonoma County retain these gains for reinvestment in Oliver's business, maintenance of current spaces and as additional payments and income for owners. This is not true when the grocer/retailer is owned outside the local area. As a locally-owned retailer, Oliver's Market provides a case study in both selling and buying locally; Oliver's purchased 29.6 percent of its cost of goods sold from suppliers in Sonoma County in 2019.

Estimating the potential effect of a similar retailer that is not locally-owned but sources some of its goods sold locally helps provide a perspective on how Oliver's reduces potential leakages versus a grocer/retailer that sources more goods sold outside Sonoma County. For Oliver's, profits made are also redistributed as philanthropy and reinvestment in local stores and communities. However, few non-local retailers buy as much locally-made products as Oliver's does; let's look at the differences when local shoppers buy at a non-local grocer/retailer.

Buying Local from a Non-Local Retailer that Sources Fewer Goods Locally to Sell

Tables 2, 3 and 4 provide the 2019 scenario for Oliver's operating in Sonoma County. The economic impacts, specifically the \$158 million in business and tax revenues Oliver's generates supporting over 1,057 local jobs (Oliver's 734 full-time equivalent workers and another 323 workers at various industries in Sonoma County as shown in Table 3) exceed those benefits from a similar model by a non-local grocer that sources less locally; for every percent less locally sourced, the additional workers supported drops by 10 workers due to fewer dollars circulating locally.

Tables 5, 6 and 7 show a similar analysis for a non-local grocer with only 18.4 percent of its cost of goods sold sourced locally. Of the \$53 million potentially retained locally by a non-local chain's operations of similar size to Oliver's, only \$94.2 million is provided as local economic benefits, approximately 59.5 percent of what Oliver's contributes (\$158.4 million in Table 2 versus \$94.2 million from Table 5). In the same way as a local farmer, food or goods distributor otherwise receives revenue for their goods based on Oliver's sourcing, workers receive payments for their time from Oliver's. What Tables 6 and 7 show is that providing local residents with jobs increases the multiplier effect of Oliver's operations retained by the Sonoma County economy.

Table 5: Business Revenue Impacts of Non-Local Grocer/Retailer compared to Non-Locally Owned Grocer/Retailer with 18.4% Goods Locally Sourced versus 29.6% at Oliver's

Industry	Direct	Indirect	Induced	Total Non-Local Owned, 18.4% Local Sourced	Total Oliver's from Table 2
Non-Local Grocery Stores	\$53,202,000	\$-	\$-	\$53,202,000	\$85,585,800
Other real estate	\$-	\$4,029,400	\$1,134,900	\$5,164,300	\$8,587,500
Owner-occupied dwellings	\$-	\$-	\$4,795,000	\$4,795,000	\$8,916,300
Hospitals	\$-	\$-	\$1,356,800	\$1,356,800	\$2,529,700
Tenant-occupied housing	\$-	\$-	\$1,026,200	\$1,026,200	\$1,873,000
Full-service restaurants	\$-	\$134,300	\$860,100	\$994,400	\$1,814,100
Other local government enterprises	\$-	\$338,800	\$597,200	\$936,000	\$1,646,300
Banks and Credit Unions	\$-	\$294,800	\$555,200	\$850,000	\$1,507,100
Offices of physicians	\$-	\$-	\$797,900	\$797,900	\$1,479,000
Electric power transmission and distribution	\$-	\$565,800	\$175,900	\$741,700	\$1,234,400
Warehousing and storage	\$-	\$688,400	\$38,600	\$727,000	\$1,179,000
Limited-service restaurants	\$-	\$36,600	\$664,800	\$701,400	\$1,285,900
All Others	\$-	\$7,455,200	\$15,504,100	\$22,959,300	\$40,747,100
Totals	\$53,202,000	\$13,543,300	\$27,506,700	\$94,252,000	\$158,385,200

Table 6: Jobs Created/Sustained of Non-Locally Owned Grocer/Retailer with 18.4% Goods Locally Sourced versus 29.6% at Oliver's

Industry	Direct	Indirect	Induced	Total Non-Local Owned, 18.4% Local Sourced	Total Oliver's from Table 3
Non-Local Grocery Stores and Other Grocery	734.0	0.0	0.0	734.0	734.0
Other real estate	0.0	13.2	4.3	17.5	28.1
Full-service restaurants	0.0	1.2	9.3	10.5	16.9
Limited-service restaurants	0.0	0.3	6.2	6.5	10.4
All other food and drinking places	0.0	1.7	4.2	5.9	9.5
Individual and family services	0.0	0.0	6.0	6.0	9.7
Services to buildings	0.0	3.6	1.5	5.1	8.2
Hospitals	0.0	0.0	5.0	5.0	8.1
Employment services	0.0	2.2	2.2	4.4	7.1
Warehousing and storage	0.0	3.7	0.2	3.9	6.4
Accounting, tax preparation, and payroll services	0.0	2.2	1.4	3.6	5.7
Automotive repair and maintenance, except car washes	0.0	0.9	2.9	3.8	6.0
All Others	0.0	30.1	99.1	129.2	207.8
Totals	734.0	59.1	142.3	935.4	1,057.9

As we see in Table 6, jobs supported by a non-local grocer/retailer that has 18.4 percent local sourcing are only 62.2 percent of **the additional** jobs Oliver's supported annually for similar-sized operations in 2019. Table 5 through 7 show a similar ripple effect, though with smaller economic impacts locally due to reduced purchases of goods locally and non-local ownership. In Table 7, the

estimated state and local tax benefits are 60.9 percent more from Oliver’s operations versus the non-local grocer/retailer. It is important to recognize that the revenue and tax impacts as annual, repeating each year Oliver’s is in business versus non-local retailers and growing in volume with Oliver’s growth.

Table 7: Tax Revenue impacts of Non-Locally Owned Grocer/Retailer with 18.4% Goods Locally Sourced versus 29.6% at Oliver’s

State and Local Taxes	Non-Local Owned, 18.4% Local Sourced	Oliver’s from Table 4
Employment Taxes	\$270,200	\$434,600
Sales taxes	\$3,625,500	\$5,832,300
Property Tax: Commercial	\$3,809,000	\$6,127,500
Property Tax: Residential	\$79,700	\$128,200
Personal Income	\$1,962,300	\$3,156,900
Other Taxes and Fees	\$793,800	\$1,277,000
Total State and Local Taxes	\$10,540,500	\$16,956,500

COVID-19 and Local Grocery: Rising in Importance

In 2020, COVID-19 wreaked havoc on the economy as a result of constrictive social policies and our inability to slow down the spread of the virus quickly. As of August 2020, California and Sonoma County are still struggling to get the economy back open in full; unemployment rates have risen sharply as of August 2020. One industry that has gained somewhat from COVID-19 and the social policy effects is grocery. Due to restrictions on restaurants and travel, residents are moving around less and eating at home more. Oliver’s, like other grocery stores, also has restaurant-like meals available at its taqueria and deli to supplement a shopper’s grocery purchases otherwise.

A major consideration of policy makers is how to be locally resilient in crises, especially with food availability. Sonoma County has had a difficult four years; fires in 2017 and 2019 slowed down the local economy in part, and in 2018 fires from other places also affected the local economy. Fires came to Sonoma County again in 2020. By purchasing local goods, Oliver’s provides a local outlet and retail station for locally-produced goods versus regional, national and global supply chains that may seize up in times of crises. Local consumer strategies drive more demand for locally-produced goods to be sold here in Sonoma County, the very thing that Oliver’s is currently helping to achieve.

5. Summary of the Oliver's Difference

We see in this study how Oliver's makes a difference in its buying strategy, but it is really a combination of local sourcing, local employees and local ownership that completes a truly virtuous circle of supporting the local economy as a grocer/retailer. For the consumer, purchasing goods at Oliver's supports local businesses beyond Oliver's itself, and more than a non-locally owned store with similar hiring and sourcing principles as Oliver's. Given regional and national supply chains, it is unlikely a non-local grocer/retailer would source as many goods from local producers as Oliver's due to cost incentives.

Oliver's sourcing-local philosophy drives big differences in how Oliver's supports the local economy versus other grocers. Going local makes a powerful, economic difference when compared to buying from non-local producers in Sonoma County. For every \$100 spent at Oliver's on local goods versus a national grocer/retailer that provides only 18.4 percent of its cost of goods sold locally in 2019, there is over 68 percent more economic impact on Sonoma County by Oliver's. For every percentage point increase that Oliver's sources locally than a national grocer/retailer, the economic impact of Oliver's rises by over \$5 million **annually** relative to this non-local grocer/retailer.

While we have compared another business of similar size as Oliver's, not sourcing as much locally also reduces local support of jobs beyond the grocery store workers. For every percentage point increase Oliver's sources locally than another grocer/retailer, 10 more jobs overall are supported in other industries in Sonoma County by Oliver's relative to this grocer/retailer. Also, Oliver's generates more in local and state taxes due to its local sourcing and selling, providing 60.9 percent more state and local tax revenues than a non-locally owned grocer/retailer that has only 18.4 percent locally-sourced goods as of 2019. For every percentage point increase that Oliver's sources locally than another grocer/retailer, state and local taxes generated by Oliver's operations rises by \$300,000 **annually** relative to this non-local grocer/retailer.

References

Dunne, Jonnie B., Kimberlee J. Chambers, Katlyn J. Giombolini, and Sheridan A. Schlegel (2011) "What does 'local' mean in the grocery store? Multiplicity in food retailers' perspectives on sourcing and marketing local foods" *Renewable Agriculture and Food Systems*, Volume 26, Issue 1, March 2011, pp. 46-59

Printezis, Iryna and Carola Grebitus (2018) "Marketing Channels for Local Food", *Ecological Economics*, Volume 152, October 2018, pp 161-71.

Data on Oliver's operations in 2019 was provided by Oliver's Markets.

Data on non-local grocer sourcing provided by IMPLAN® (2020), <http://www.implan.com>. The economic impact model for Sonoma County used above is also from IMPLAN, accessed at <http://app.implan.com>. Bureau of Economic Analysis or BEA (<http://www.bea.gov>) provides source data for IMPLAN® through BEA's RIMS model.