

— SANTA MONICA —  
**FARMERS  
MARKETS**

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Summer 2017 Price Comparison Project

Emma Finn  
*Volunteer Intern*  
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## **I. Abstract**

Shopping at farmers markets is often perceived to be more expensive than shopping at retail grocery stores. This study provides data from the Wednesday Downtown Santa Monica Farmers Market to verify that this perception is not always the case, and that farmers markets actually offer very comparable prices to that of nearby grocery stores while holding all sorts of added value. Some items may be slightly more expensive at the farmers market while other items are significantly cheaper, however prices vary greatly depending on the product, product origin, seasonality, certification, etc. In addition, the prices of goods you buy at a farmers market will vary from vendor to vendor, by certification (or lack thereof), by seasonality, and even by time of day (i.e. at the beginning or end of the market day). Furthermore, while price is the baseline comparison used in this study, there are all sorts of additional value that come with purchasing produce at farmers markets, including valuable farmer-to-consumer relationships, assurance of ripeness and freshness, more variety, and, many would argue, better tasting and higher quality items.

## **II. Introduction**

The purpose of this project is to provide an objective comparison between Santa Monica Farmers Markets and retail grocery stores on the basis of price. While there are numerous other factors that can be used to compare grocery stores and farmers markets, this study focuses on the prices found in a basket of produce that a typical Santa Monica resident may be looking to purchase in July. The seasonality of this report is key because farmers can only bring what they are currently growing in season to the market. Going into this report, our hopes were to debunk the commonly held preconception that farmers markets are unaffordable or extremely expensive. We believe that price is a useful unit for a baseline comparison that will reach a wide audience, particularly targeting those who perceive price to be a barrier to coming to and purchasing from farmers markets.

Previous research on farmers market prices includes a study published by the Northeast Organic Farming Association (NOFA) of Vermont, in which prices per item for each venue were compiled in three comparisons: farmers market conventional versus grocery store conventional, farmers market organic versus grocery store organic and co-op organic, and farmers market organic versus grocery store conventional. The study found that prices of conventional produce at farmers markets are in many cases competitive with conventional produce at grocery stores. Perhaps most important, every Organic item (with the exception of potatoes) was less expensive at farmers markets than at grocery stores, and, in some cases, Organic items at farmers markets were less expensive than conventional items at grocery stores (Caro, 2011).

Using the Vermont study as guidance for formulating a similar research project, we chose to focus on comparing prices of both Organic and conventional produce from the Wednesday Downtown Santa Monica Farmers Market to that of Vons, Whole Foods Market, as well as the Santa Monica Co+Opportunity Market & Deli. It is important to note that market vendors whose farms are not certified Organic, even if they employ sustainable agriculture practices, were categorized as offering “conventional” produce.

### **III. Methods**

The following 16 items were chosen for a common July produce basket: basil, beefsteak tomatoes, bell peppers (green), blueberries, carrots (bunch), cherry tomatoes, hass avocados, Italian parsley, lemons, muskmelon/cantaloupe, Persian cucumbers, red onion, romaine lettuce, Tuscan kale, yellow peaches, and zucchini. Prices of both certified Organic and conventional produce were recorded in separate categories to account for variations resulting from possible price premiums. Data were collected first from the Wednesday Downtown Santa Monica Farmers Market, and prices were recorded for each of the 16 items at every vendor that sold it. If an item was not priced by weight (i.e. per pound), it was weighed and recorded. For example, each basket of cherry tomatoes, each bunch of cilantro, and each avocado being sold individually were carefully weighed in order to account for the variation of quantity in a given “bunch” or “basket.” After recording data from the Wednesday Downtown Santa Monica Farmers Market, this recording process was repeated at the Santa Monica Co+Opportunity Market & Deli, Whole Foods Market, and Vons (all located within the city of Santa Monica).

The data recorded per good includes item locality (local/California-grown versus grown within the U.S. versus internationally grown), item origin (name and location of farm, if specified), item type (Organic versus conventional), price listed (per unit used to sell), weight of item (if not priced by weight), and other notes (i.e. quality, variety). Although this level of detail is not included in the aggregate data displayed in the graphs of this report, these are important measures of value for shoppers looking beyond price. The variety and variability of produce offered at the Santa Monica Farmers Market is much greater than produce at other retail outlets; there are multiple farmers to choose from, wide variations in price, different regions and methods of growing, etc.

After collecting the data, a few important calculations were performed. First, every item that was not sold by weight (i.e. per pound) had its prices converted such that weight would account for variance in quantity. Then, average market prices for Organic and conventional items were calculated for each of the 16 items sold amongst vendors at the Wednesday Downtown SMFM. Third, an average weight for each item between retailers was calculated, for the purpose of providing prices more accurately to the consumer (i.e. basil isn't typically sold by the pound, so its price was calculated for an average weight of one bunch). Finally, graphs were created in Excel to visually display the price differences per item per location/retailer.

### **IV. Results**

For each item of produce chosen for this project, different vendors offered the lowest and highest prices. The data shows that price greatly varies depending on the produce item--there is no one winner or loser offering the “best price.” Furthermore, it really depends on the farmer/retailer, the season, and the certification (or lack thereof).

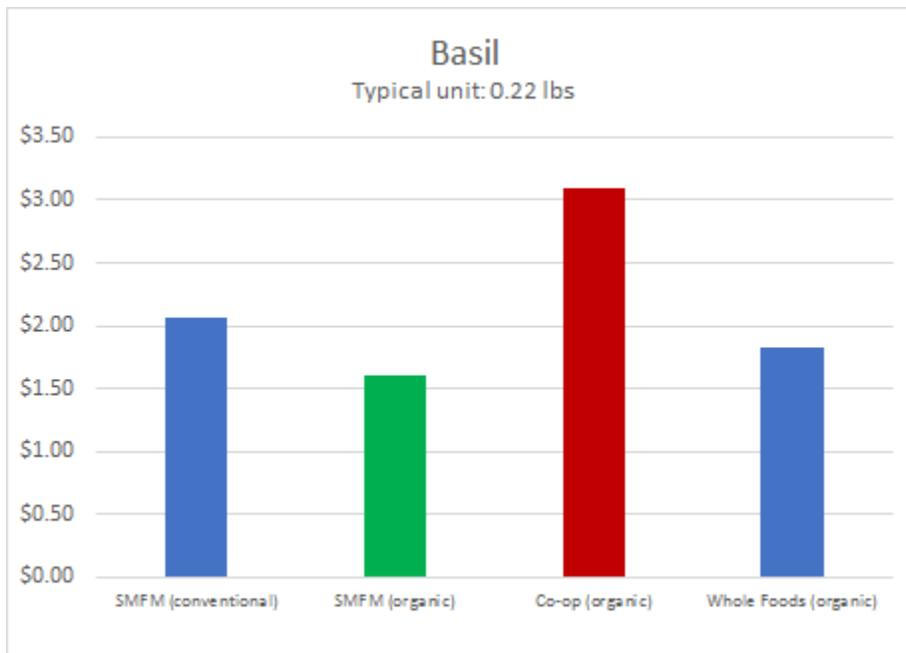
Santa Monica Farmers Market prices are lowest for 2 out of the 16 produce items: Organic basil and cherry tomatoes (conventional). At the same time however, for 10 out of the 16 items, the SMFM did not offer the highest price. Most frequently, Whole Foods' Organic produce was the

most expensive option (6 out of 16 items or 37.5%), and Vons' conventional produce was the least expensive option (10 out of 16 items or 62.5%).

Overall, the Santa Monica Farmers Market offers prices comparable to that of other grocery outlets (see Appendix). Nevertheless, prices vary between products and vendors, and there are not always price premiums placed on Organic produce. For example, the average price for Organic basil at the SMFM offers the cheapest price for all basil sold between retailers at the market. Note: the green bar shown in the graph below indicates the cheapest price, while the red bar indicates the most expensive.

Basil:

Location	Item Type	Item Name	Price (USD)	Per Pound (lb)	Price (USD)	Unit Used to Sell
SMFM	Organic	Basil	7.33	lb	2.13	per bunch
Whole Foods Market	Organic	Basil	8.29	lb	1.99	per bunch
SMFM	Market Avg.	Basil	8.5	lb	2.08	per bunch
SMFM	conventional	Basil	9.37	lb	2	per bunch
Co-Opportunity Market	Organic	Basil	14.08	lb	1.69	per bunch



It is also worth noting that Vons did not offer all of the items chosen for this project (e.g. basil is not sold by the bunch at the Vons in downtown Santa Monica). While Whole Foods did offer every item, the store did not offer both conventional and Organic choices for every item. The SMFM, on the other hand, offered all of the produce items in the conventional category and all

but one in the Organic category. The Co+Opportunity Market & Deli offers only Organic produce. In terms of locality (and in turn, freshness), all Santa Monica Farmers Market produce is guaranteed to be grown in California, while produce from every other grocery store is not always from California, or even from within the United States (this applies most often to Organic items).

Another point of interest is that some conventional items were more expensive than their Organic counterparts at the SMFM, including basil, hass avocados, romaine lettuce, red onion, and muskmelon. This is due to the variation between vendors, who determine their own prices based on quality, seasonality, customer demand, intensive farming practices, etc.

## **V. Discussion**

There are many factors that we believe add incredible value to a farmers market. For example, the variety of produce available at the farmers markets is unique to the market--you will not find cherums (cherry-plums), 18 varieties of Organic blueberries, Persian mulberries, etc., at the supermarket. Diversity in what farmers grow is imperative to sustainable agriculture, and challenges the narrative of commercial monoculture produced by agribusiness. Finally, the flavor of fruits, vegetables, legumes, and more at the farmers market is a considerable factor when deciding where to shop. Much of the produce at the Santa Monica Farmers Market is picked and packaged a few days before the market. This is crucial to providing fresh, flavorful produce for market-shoppers, as full flavor and nutrition comes from picking fully vine- and tree-ripe fruits and vegetables. Writer and pomologist David Karp notes that tastelessness or off-flavors often found in produce sold at supermarkets likely arise from a combination of production-side tactics: overcropping, premature picking, overapplication of gibberellic acid (a hormone used to increase firmness and delay harvest), and prolonged storage late in the season (2017). In a recent article published by the Art of Eating on high flavor in fruit, Karp states that "distance from the farm, time after harvest, and layers of middlemen are the enemies of high flavor" (2017).

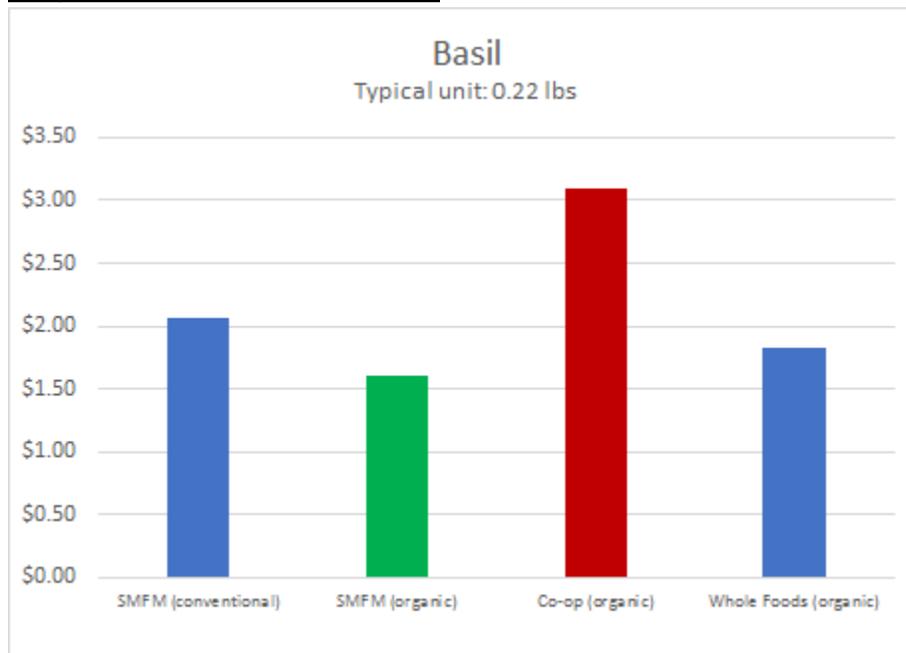
The variance in price of the same food items sold by different vendors at the farmers market makes shopping here quite different than shopping at a retail grocery store. For the same food item, one may find many more options in terms of the source/farmer, price, size, variety, and taste or quality at the market. Thus, it is generally beneficial for consumers to walk through the whole market first; sample a few of the items and compare prices for oneself before purchasing anything. You may walk the entire market and discover the best price for leafy greens that you jump to purchase, but also end up choosing to buy a more expensive yellow peach if you find that a certain vendor's fruit tastes astronomically better than any other ones you've tried. Buying in bulk and splitting with friends or family, purchasing at the end of the market day, and personal price comparison are a few key ways to getting the best deal on produce at a farmers market.

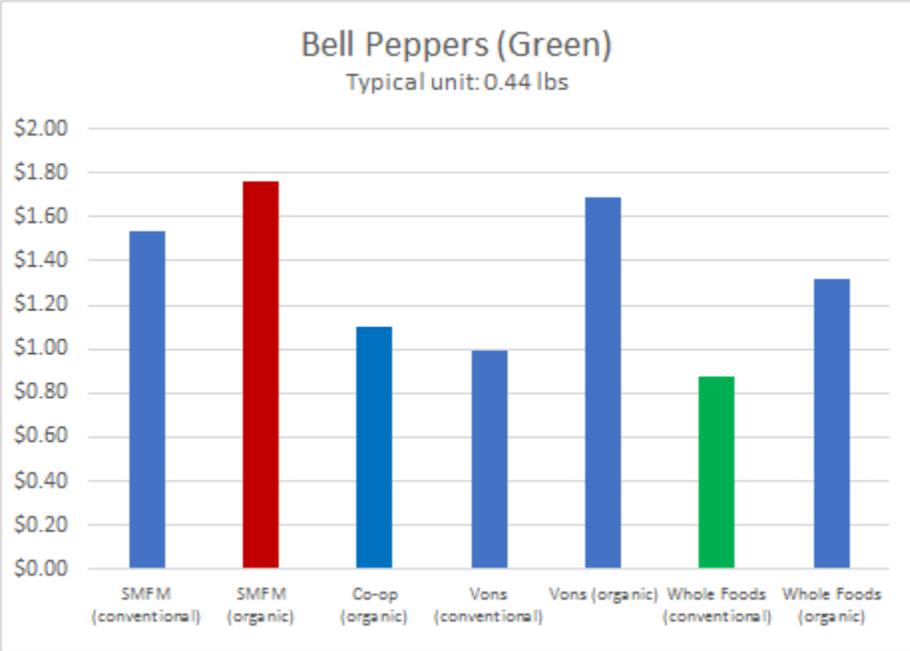
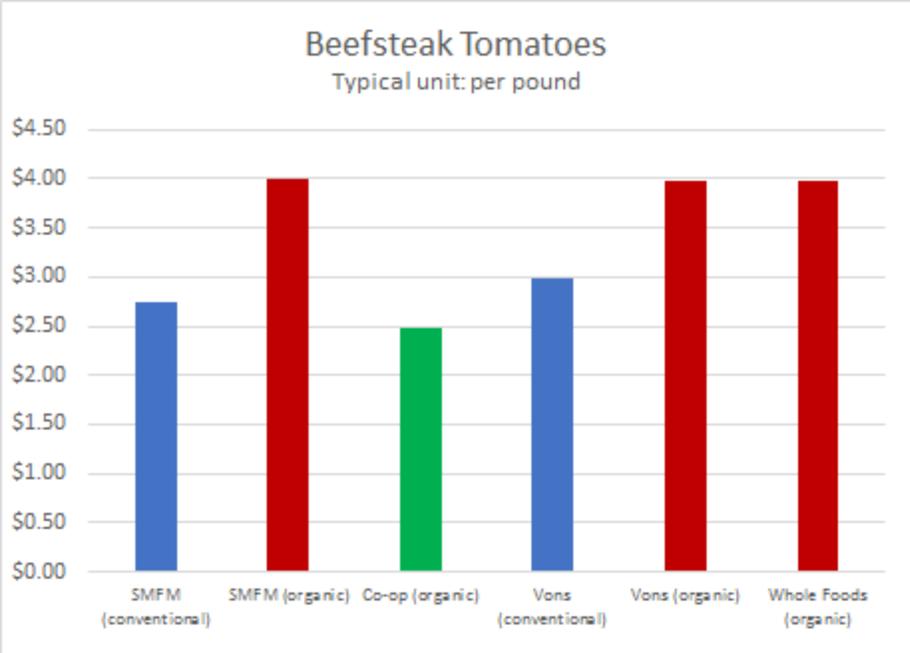
## **VI. Appendix**

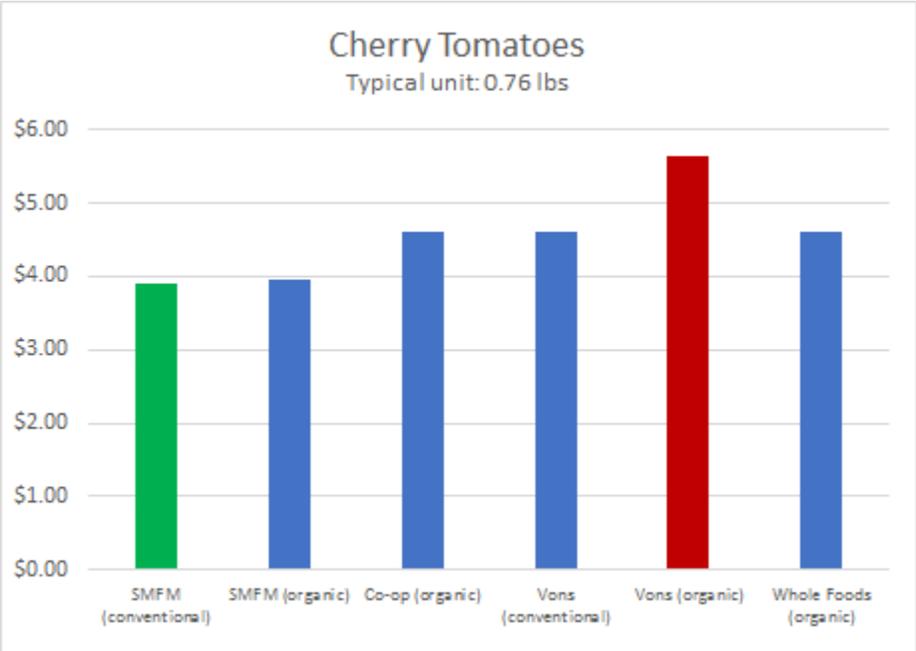
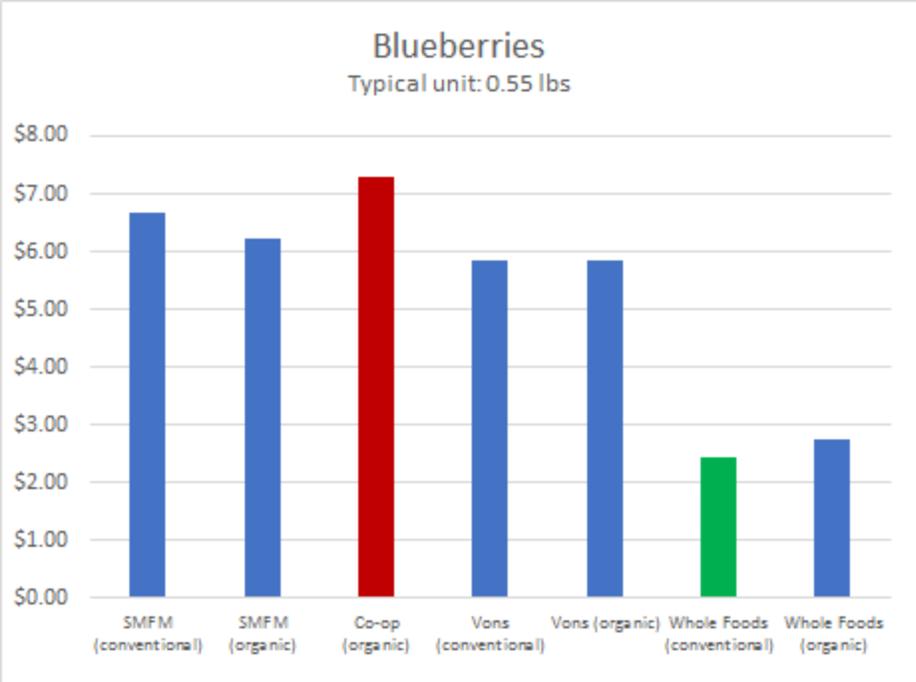
Table: Price per Typical Unit

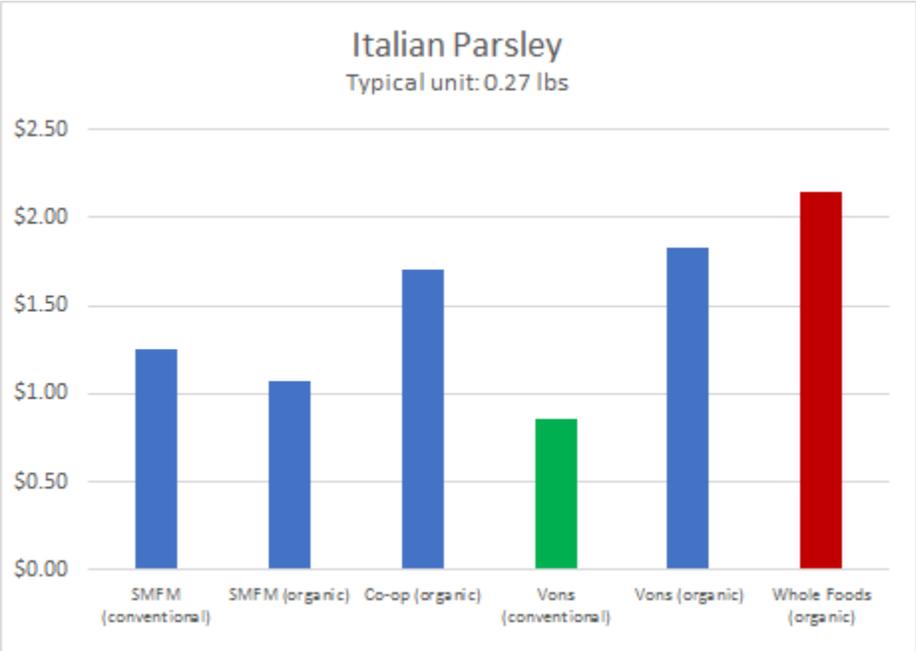
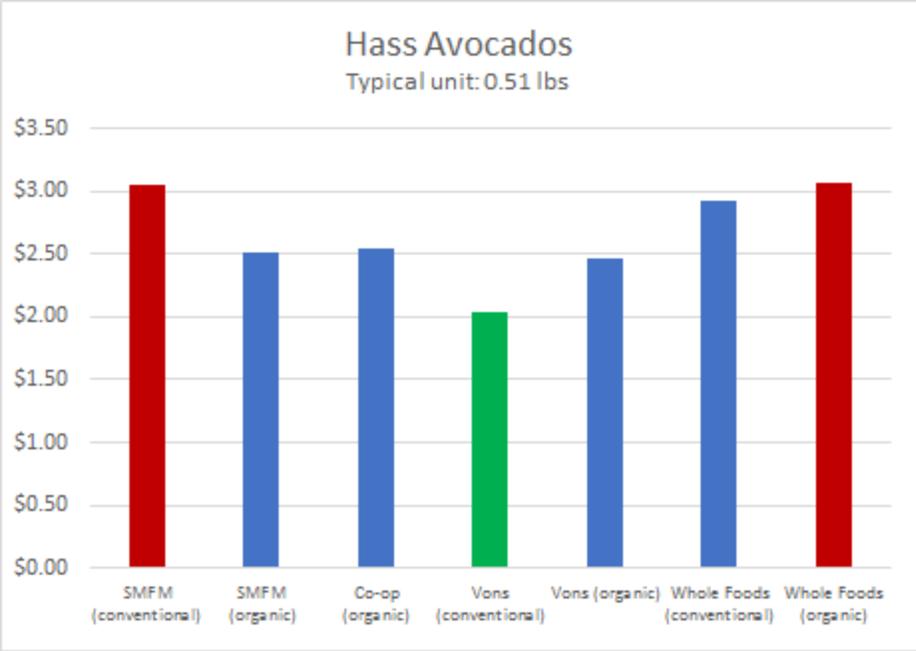
Price Per Typical Unit								
ItemName	avg_weight	SMFM (conventional)	SMFM (organic)	Co-op (organic)	Vons (conventional)	Vons (organic)	Whole Foods (conventional)	Whole Foods (organic)
Basil	0.22	\$2.06	\$1.61	\$3.10				\$1.82
Beefsteak Tomatoes		\$2.75	\$4.00	\$2.49	\$2.99	\$3.99		\$3.99
Bell Peppers - Green	0.44	\$1.54	\$1.76	\$1.10	\$0.99	\$1.69	\$0.88	\$1.32
Blueberries	0.55	\$6.67	\$6.22	\$7.29	\$5.83	\$5.83	\$2.43	\$2.75
Carrots (bunch)	0.83	\$3.09	\$2.36	\$2.82				\$2.79
Cherry Tomatoes	0.76	\$3.89	\$3.96	\$4.62	\$4.62	\$5.65		\$4.62
Hass Avocados	0.51	\$3.05	\$2.51	\$2.55	\$2.04	\$2.46	\$2.92	\$3.06
Italian Parsley	0.27	\$1.25	\$1.07	\$1.71	\$0.86	\$1.83		\$2.15
Lemons	0.52	\$1.57	\$1.57	\$1.56	\$1.38		\$1.29	\$2.07
Muskmelons/Canteloupe	3.52	\$7.91	\$6.15	\$4.18	\$2.88	\$4.15	\$5.76	
Persian Cucumbers	1.19	\$3.87		\$3.56	\$2.58	\$5.94	\$2.96	
Red Onion		\$1.88	\$1.50	\$1.99	\$1.49	\$1.99		\$1.99
Romaine Lettuce	1.02	\$3.74	\$2.71	\$2.70	\$1.30	\$1.55		\$2.86
Tuscan Kale	0.43	\$1.66	\$2.40	\$1.93		\$1.37		\$2.44
Yellow Peaches		\$3.34	\$3.50	3.99	\$2.99			\$2.99
Zucchini		\$1.88	\$2.25	\$2.59	\$1.59			\$2.49

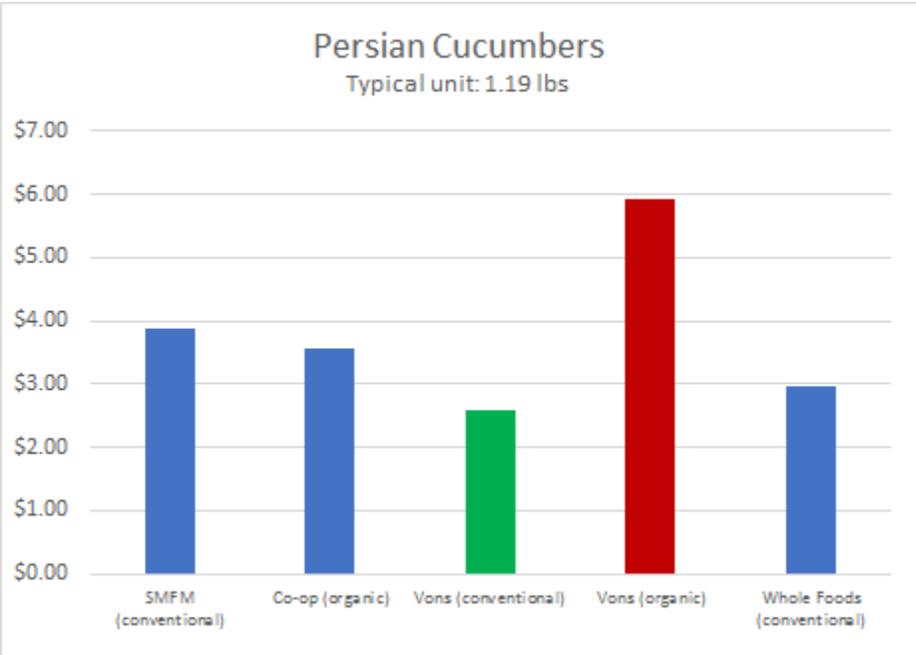
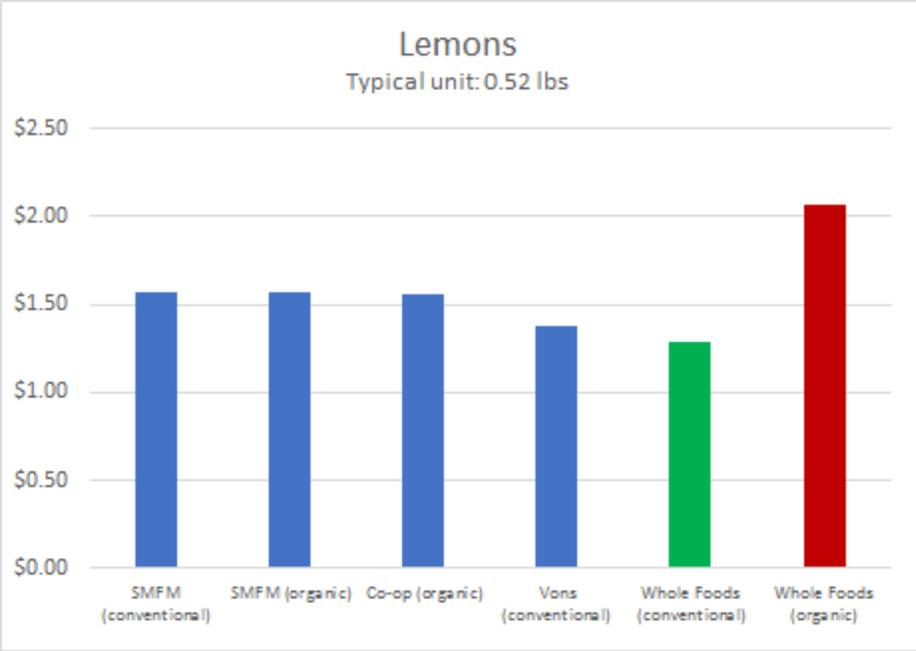
### Graphs: Individual Produce Items

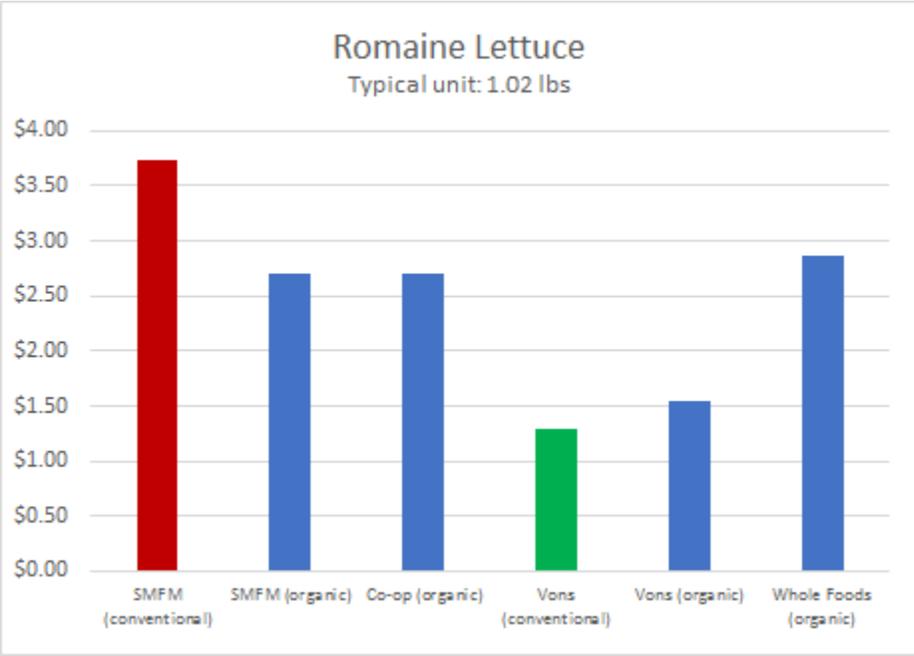
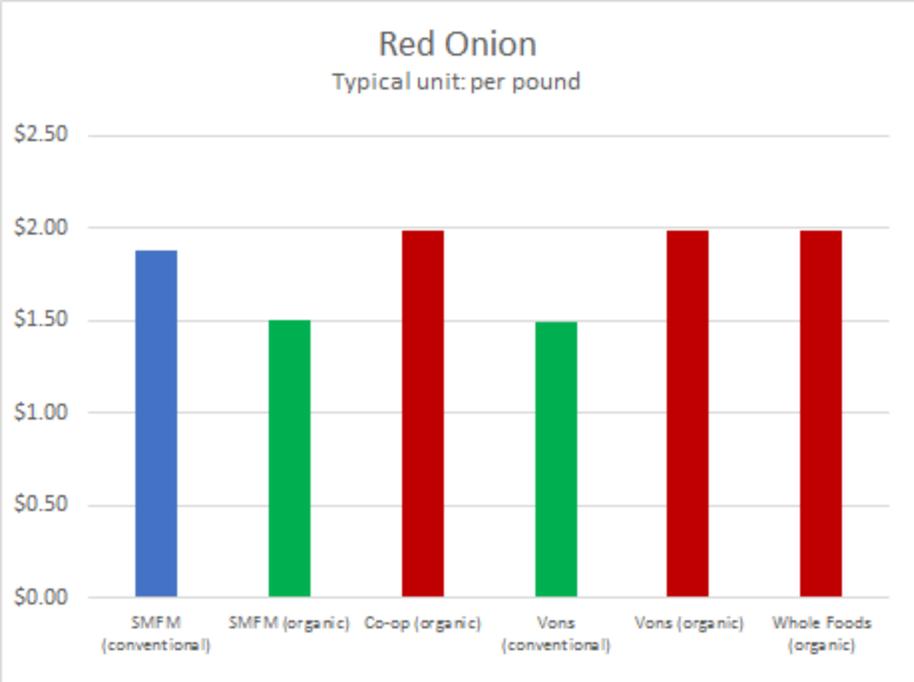


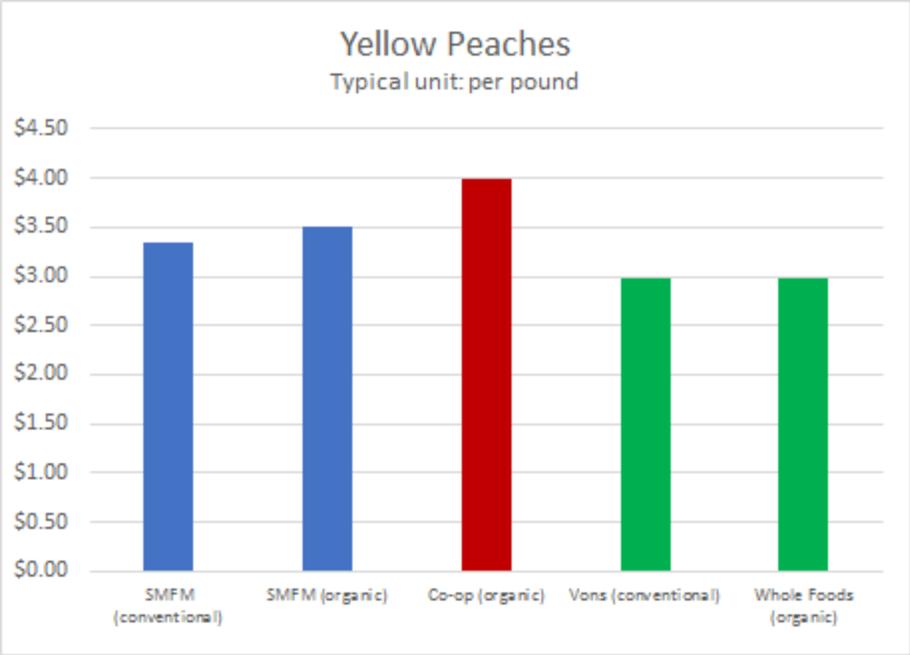












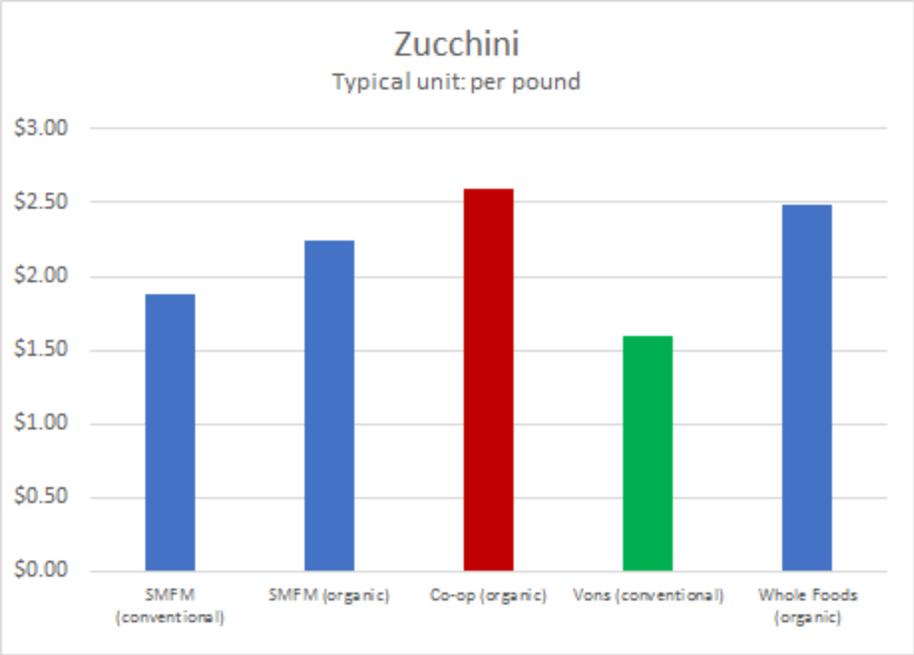
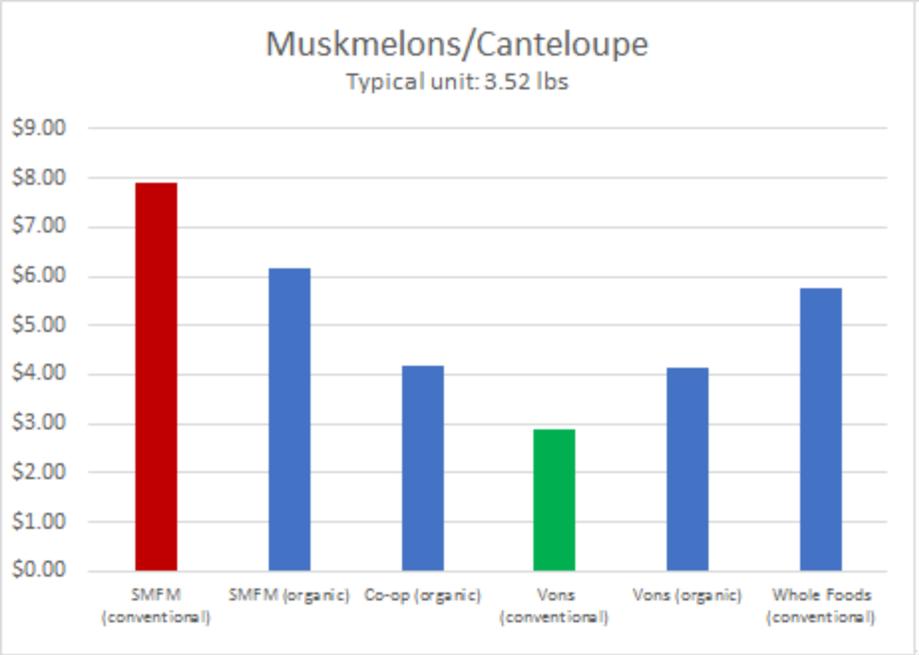


Table: Price Comparison Averages (3 pages)



Location	Item Type	Item Name	Price (USD)	Per Pound (lb)	Price (USD)	Unit Used to Sell	Weight (lb)	Notes
SMFM	Organic	Basil	7.33	lb	2.13	per bunch		
Whole Foods Market	Organic	Basil	8.29	lb	1.99	per bunch		
SMFM	Market Avg.	Basil	8.5	lb	2.08	per bunch		
SMFM	conventional	Basil	9.37	lb	2	per bunch		
Co-Opportunity Market	Organic	Basil	14.08	lb	1.69	per bunch		
Co-Opportunity Market	Organic	Beefsteak Tomatoes	2.49	lb				From Mexico
Whole Foods Market	Organic	Beefsteak Tomatoes	3.99	lb				From Mexico
Vons	Organic	Beefsteak Tomatoes	3.99	lb				"HOTHOUSE"
SMFM	Organic	Beefsteak Tomatoes	4	lb				Harry's Berries skews this data
SMFM	conventional	Beefsteak Tomatoes	2.75	lb				
SMFM	Market Avg.	Beefsteak Tomatoes	3.17	lb				Harry's Berries skews this data
Vons	conventional	Beefsteak Tomatoes	2.99	lb				"HOTHOUSE"
Whole Foods Market	conventional	Bell Peppers - Green	1.99	lb				
Vons	conventional	Bell Peppers - Green	2.25	lb	0.99	each		
Co-Opportunity Market	Organic	Bell Peppers - Green	2.49	lb				
Whole Foods Market	Organic	Bell Peppers - Green	2.99	lb				
Vons	Organic	Bell Peppers - Green	3.84	lb	1.69	each		
SMFM	conventional	Bell Peppers - Green	3.5	lb				
SMFM	Market Avg.	Bell Peppers - Green	3.75	lb				
SMFM	Organic	Bell Peppers - Green	4	lb				
Whole Foods Market	conventional	Blueberries	4.44	lb	4.99	per basket	1.125	
Whole Foods Market	Organic	Blueberries	5.03	lb	3.99	per basket	0.794	
SMFM	Organic	Blueberries	11.36	lb	5	per basket	0.44	
SMFM	Market Avg.	Blueberries	11.91	lb	5.33	per basket	0.45	
SMFM	conventional	Blueberries	12.19	lb	5.5	per basket	0.46	
Vons	conventional	Blueberries	10.64	lb	3.99	per basket	0.375	
Vons	Organic	Blueberries	10.64	lb	3.99	per basket	0.375	
Co-Opportunity Market	Organic	Blueberries	13.31	lb	4.99	per basket	0.375	
SMFM	Organic	Carrots (bunch)	2.86	lb	2.83	per bunch	1.09	
Whole Foods Market	Organic	Carrots (bunch)	3.38	lb	2.99	per bunch	0.89	
SMFM	Market Avg.	Carrots (bunch)	3.41	lb	2.56	per bunch	0.88	
Co-Opportunity Market	Organic	Carrots (bunch)	3.42	lb	2.99	per bunch	0.875	
SMFM	conventional	Carrots (bunch)	3.74	lb	2.4	per bunch	0.75	
SMFM	conventional	Cherry Tomatoes	5.1	lb	4	per basket	0.92	
Vons	conventional	Cherry Tomatoes	6.05	lb	3.99	per basket	0.66	international -- Mexico
SMFM	Market Avg.	Cherry Tomatoes	5.14	lb	4.38	per basket	0.9	Harry's Berries skews this data
SMFM	Organic	Cherry Tomatoes	5.19	lb	4.75	per basket	0.88	Harry's Berries skews this data
Vons	Organic	Cherry Tomatoes	7.4	lb	5.99	per basket	0.81	international -- Mexico
Co-Opportunity Market	Organic	Cherry Tomatoes	6.05	lb	3.99	per basket	0.66	
Whole Foods Market	Organic	Cherry Tomatoes	6.05	lb	3.99	per basket	0.66	
SMFM	Organic	Hass Avocados	4.89	lb	2.75	each		
Co-Opportunity Market	Organic	Hass Avocados	4.98	lb	2.49	each		
Whole Foods Market	Organic	Hass Avocados	5.98	lb	2.99	each		
Vons	Organic	Hass Avocados	4.8	lb	2.69	each		

Location	Item Type	Item Name	Price (USD)	Per Pound (lb)	Price (USD)	Unit Used to Sell	Weight (lb)	Notes
Vons	conventional	Hass Avocados	3.98	lb	2.49	each	0.625	depends on size (Large vs. Extra Large)
Whole Foods Market	conventional	Hass Avocados	5.69	lb	1.99	each		
SMFM	Market Avg.	Hass Avocados	5.75	lb	2.86	each		
SMFM	conventional	Hass Avocados	5.95	lb	3	each		
SMFM	Organic	Italian Parsley	3.95	lb	1.5	per bunch		
SMFM	Market Avg.	Italian Parsley	4.52	lb	1.32	per bunch		
SMFM	conventional	Italian Parsley	4.62	lb	1.29	per bunch		
Vons	conventional	Italian Parsley	3.19	lb	0.99	per bunch	0.31	
Vons	Organic	Italian Parsley	6.79	lb	1.29	per bunch	0.19	
Co-Opportunity Market	Organic	Italian Parsley	6.35	lb	1.19	per bunch		
Whole Foods Market	Organic	Italian Parsley	7.96	lb	1.99	per bunch		
Whole Foods Market	conventional	Lemons	2.47	lb	0.79	each		
Vons	conventional	Lemons	2.64	lb	0.99	each		
Co-Opportunity Market	Organic	Lemons	2.99	lb	2.99	lb		
SMFM	Organic	Lemons	3	lb	3	lb		
SMFM	conventional	Lemons	3	lb	0.58	each		
Whole Foods Market	Organic	Lemons	3.96	lb	0.99	each		
Co-Opportunity Market	Organic	Muskmelons/Cantaloupe	1.19	lb				Honeydew
Vons	Organic	Muskmelons/Cantaloupe	1.18	lb	3.99	each	3.38	
Vons	conventional	Muskmelons/Cantaloupe	0.82	lb	2.99	each	3.625	
Whole Foods Market	conventional	Muskmelons/Cantaloupe	1.64	lb				Galia & Hami Melons
SMFM	Organic	Muskmelons/Cantaloupe	1.75	lb				
SMFM	Market Avg.	Muskmelons/Cantaloupe	2.13	lb				
SMFM	conventional	Muskmelons/Cantaloupe	2.25	lb				
Co-Opportunity Market	Organic	P(ersian) Cucumbers	2.99	lb				
Vons	Organic	Persian Cucumbers	4.99	lb	4.99	per bag		
Vons	conventional	Persian Cucumbers	2.17	lb	2.99	per pack		"mini snacking" cucumbers
Whole Foods Market	conventional	Persian Cucumbers	2.49	lb				
SMFM	conventional	Persian Cucumbers	3.25	lb				
SMFM	Organic	Red Onion	1.5	lb				
SMFM	Market Avg.	Red Onion	1.8	lb				
SMFM	conventional	Red Onion	1.88	lb				
Vons	conventional	Red Onion	1.49	lb				
Vons	Organic	Red Onion	1.99	lb				
Co-Opportunity Market	Organic	Red Onion	1.99	lb				
Whole Foods Market	Organic	Red Onion	1.99	lb				
Co-Opportunity Market	Organic	Romaine Lettuce	2.65	lb	1.99	per head	0.75	
Whole Foods Market	Organic	Romaine Lettuce	2.8	lb	2.49	per head	0.89	
Vons	Organic	Romaine Lettuce	1.52	lb	1.99	per head	1.31	
SMFM	Organic	Romaine Lettuce	2.66	lb	2	per head	0.86	
Vons	conventional	Romaine Lettuce	1.27	lb	1.79	per head	1.41	
SMFM	conventional	Romaine Lettuce	3.67	lb	1.75	per head	1.75	
SMFM	Market Avg.	Romaine Lettuce	1.99	lb	3.08	per head	1.21	
SMFM	conventional	Tuscan Kale	3.87	lb	1.75	per bunch	0.47	

Location	Item Type	Item Name	Price (USD)	Per Pound (lb)	Price (USD)	Unit Used to Sell	Weight (lb)	Notes
SMFM	Market Avg.	Tuscan Kale	4.31	lb	1.93	per bunch	0.46	
Co-Opportunity Market	Organic	Tuscan Kale	4.51	lb	1.69	per bunch	0.375	
SMFM	Organic	Tuscan Kale	5.61	lb	2.33	per bunch	0.42	
Whole Foods Market	Organic	Tuscan Kale	5.69	lb	1.99	per bunch	0.35	
Vons	Organic	Tuscan Kale	3.19	lb	1.69	per bunch	0.53	
Co-Opportunity Market	Organic	Yellow Nectarines/White Peaches	3.99	lb				
Whole Foods Market	Organic	Yellow Peaches	2.99	lb				
Vons	conventional	Yellow Peaches	2.99	lb				various sources/farms/varieties all in one box
SMFM	conventional	Yellow Peaches	3.34	lb				
SMFM	Market Avg.	Yellow Peaches	3.38	lb				
SMFM	Organic	Yellow Peaches	3.5	lb				
Vons	conventional	Zucchini	1.59	lb				
SMFM	conventional	Zucchini	1.88	lb				
SMFM	Market Avg.	Zucchini	2	lb				
SMFM	Organic	Zucchini	2.25	lb				
Whole Foods Market	Organic	Zucchini	2.49	lb				
Co-Opportunity Market	Organic	Zucchini	2.59	lb				
Vons								