## Bonnie Gee Yosick IIc

# MEMORANDUM 

To: Steve Cohen, Office of Sustainable Development
From: Bonnie Gee Yosick
DATE: July 1, 2008
Subject: Market Demand Potential for Farmers Markets

## Introduction

The City of Portland Office of Sustainable Development (OSD) and Portland Development Commission are conducting a study examining the capacity of Portland's farmers markets to expand into the future, looking at both local consumer demand and regional farmer / vendor supply. To complete the study, the City has commissioned the Farmers Market Collaborative, a consultant team led by Barney \& Worth, Inc. and including Bonnie Gee Yosick LLC.

The purpose of this memo is to provide an overview of consumer expenditure data and household estimates and projections in order to understand the overall potential for market demand for farmers markets.

## Overview of Consumer Spending

Total average household spending in the Portland Metropolitan area (2004-2005) was estimated at just over $\$ 50,000$ for all categories, according to the Bureau of Labor Statistics' Consumer Expenditure Survey (see Table 1). Average household spending for all categories for the Portland Metropolitan Area and for Western Regional Consumers is shown in Table 1. Food spending averaged nearly $\$ 6,400$ for Portland area households (about $\$ 17.50$ per day), a little higher than the average for all western households.

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Table 1
Consumer Expenditure Patterns and Key Demographic Characteristics
Portland Metropolitan Area and All Western Households

|  | $\begin{gathered} \hline \text { 2004-2005 } \\ \text { CES } \\ \text { Portland } \\ \hline \end{gathered}$ | 2004-2005 <br> All Western Households | 2005-2006 <br> All Western Households |
| :---: | :---: | :---: | :---: |
| Number of households | 1,052,000 | 25,872,000 | 26,149,000 |
| Household characteristics |  |  |  |
| Income before taxes | 56,702 | 60,730 | 66,452 |
| Age of reference person | 47.9 | 47 | 47.4 |
| Average number in household |  |  |  |
| Persons | 2.5 | 2.6 | 2.6 |
| Children under 18 | 0.6 | 0.7 | 0.7 |
| persons 65 and over | 0.3 | 0.3 | 0.3 |
| Earners | 1.4 | 1.4 | 1.4 |
| Vehicles | 2.2 | 2.1 | 2.1 |
| Percent homeowner | 63 | 62 | 63 |
| Average annual expenditures | \$50,313 | \$50,305 | \$55,214 |
| Food | \$6,377 | \$6,280 | \$6,745 |
| Alcoholic beverages | \$526 | \$517 | \$585 |
| Housing | \$16,039 | \$16,828 | \$19,064 |
| Apparel and services | \$1,822 | \$1,954 | \$2,050 |
| Transportation | \$8,845 | \$9,498 | \$10,112 |
| Healthcare | \$2,693 | \$2,602 | \$2,751 |
| Entertainment | \$3,057 | \$2,636 | \$2,960 |
| Personal care products and services | \$578 | \$621 | \$652 |
| Reading | \$188 | \$153 | \$150 |
| Education | \$1,200 | \$1,039 | \$937 |
| Tobacco product and smoking supplies | \$344 | \$239 | \$267 |
| Miscellaneous | \$1,303 | \$910 | \$1,033 |
| Cash contributions | \$1,775 | \$1,576 | \$1,993 |
| Personal insurance and pensions | \$5,565 | \$5,451 | \$5,917 |

Source: Bureau of Labor Statistics Consumer Expenditure Survey (CES), U.S. Census Bureau.
As shown in Table 2, of the food spending more than half was spent on food consumed at home (compared to food consumed away from home), including an estimated $\$ 453$ in cereal and bakery products; $\$ 783$ in meats, poultry, fish, and eggs; \$432 in dairy products; and an estimated $\$ 650$ in fruits and vegetables-the key driver of many farmers market operations.

Table 2
Consumer Expenditure Patterns Portland Metropolitan Area, 2004-2005

|  | 2004-2005 <br> CES Portland |
| :---: | ---: |
| Average household annual expenditures | $\$ 50,313$ |
| Food | $\$ 6,377$ |
| Food at home | $\$ 3,557$ |
| Cereals and bakery products | $\$ 453$ |
| Meats, poultry, fish, and eggs | $\$ 783$ |
| Dairy products | $\$ 432$ |
| Fruits and vegetables | $\$ 650$ |
| Other food at home | $\$ 1,239$ |
| Food away from home | $\$ 2,820$ |

Source: Bureau of Labor Statistics Consumer Expenditure Survey (CES), U.S. Census Bureau.

## Estimated Size of Market Demand for Farmers Markets

To evaluate the overall market demand of this estimated household spending in terms of its meaning to farmers markets, we need to calculate the aggregate trade area for farmers markets for our current analysis. Given that this analysis focuses on the 14 existing farmers markets within the City of Portland, and to be consistent with our economic impact analysis, we have defined the primary market area for this analysis as Multnomah County.

Metro's Data Resource Center has estimated the number of households by city and county jurisdictions, prepared a forecast of estimated households for these areas to year 2030, and disaggregated this forecast, with participation from the affected jurisdictions. From this analysis, the number of households within Multnomah County was estimated at 288,926 in 2005, and is forecast to increase to 372,913 by year 2030. The number of households within the City of Portland is slightly lower, 235,180 in 2005, estimated to reach 299,355 by year 2030, as shown in Table 3.

Table 3
Estimated Number of Households

|  | Number of Households |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 3 0}$ |
| Clackamas County | 140,415 | 241,821 |
| Multnomah County | 288,926 | 372,913 |
| Washington County | 189,925 | 272,998 |
| Grand Total | 619,266 | 887,732 |
| City of Portland | 235,180 | 299,355 |

Source: Metro Data Resource Center.
Applying the estimated 288,926 households in Multnomah County in 2005 to the estimated household expenditures yields over \$1 billion in aggregated spending for food
at home items, including: over $\$ 130$ million in cereals and bakery products; $\$ 226$ million in meats, poultry, fish, and eggs; nearly $\$ 125$ million in dairy; and nearly $\$ 188$ million in fruits and vegetables, as shown in Table 4.

What these aggregated values mean to farmers markets depends on the amount of food-at-home spending that farmers markets are able to capture. For example, if farmers markets were to capture 2 percent of all spending in the fruit and vegetable category, the overall market for that segment would total nearly $\$ 3.8$ million. Examples of the market segment for fruits and vegetables at 2 percent, 10 percent, and 20 percent are shown in Table 4.

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Table 4
Aggregated Food Spending
Multnomah County Households

|  | Annual Expenditures <br> (millions of dollars) <br> Multnomah County <br> Residents | If Farmers Markets were to capture <br> 10\% | 20\% |
| :---: | ---: | :---: | :---: |

*Based on Metro's estimated number of households in Multnomah County in 2004 and BLS' average annual expenditures for the Portland Metropolitan area for 2004-2005.
Source: Bureau of Labor Statistics, U.S. Census Bureau (consumer expenditure data); Metro Data Resource Center (household estimates and projections).

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## Farmers Markets Current Capture of Food Spending

In 2007, the 14 farmers markets in Portland sold an estimated aggregate of nearly $\$ 11.2$ million, as shown in Table 5.

Table 5
Portland Farmers Markets
2007 Market Sales

| Alberta | $\$ 4,000$ |
| :--- | ---: |
| Hillsdale |  |
| • Summer | $\$ 1,820,000$ |
| • Winter | $\$ 650,000$ |
| Hollywood | $\$ 1,740,000$ |
| Interstate | $\$ 400,000$ |
| Lents | $\$ 40,000$ |
| Lloyd | $\$ 71,000$ |
| Montavilla | $\$ 207,000$ |
| Moreland | $\$ 280,000$ |
| OHSU | $\$ 85,000$ |
| Peoples* | $\$ 291,200$ |
| Portland | $\$ 287,900$ |
| - Eastbank | $\$ 227,000$ |
| - Ecotrust | $\$ 4,335,500$ |
| - PSU | $\$ 758,300$ |
| - Shemanski | $\$ 11,196,900$ |
| Total |  |
| Source: Market managers, compiled by Barney \& Worth, Inc. |  |
| and Farmers' Markets America |  |
| *Consultant team estimate |  |

Note: Totals include prepared food.

Portland Farmers Market provided week-by-week sales reports filed by vendors for the PSU market's 2007 season. These reports were voluntary and not submitted by all vendors. With sales of approximately $\$ 1.65$ million represented, these data represent approximately 38 percent of the PSU market's total of an estimated $\$ 4.3$ million. Using percentage sales in the categories provided by Portland Farmers Market, the estimated distribution of sales for 14 markets is shown in Table 6.

Table 6
Portland Farmers Market Distribution of Sales, by Dollar Volume

| Item | Percent of Dollar <br> Volume Sold | Estimated Sales of all <br> 14 Portland-area <br> Markets |
| :--- | ---: | ---: |
| Vegetables | $32.0 \%$ | $\$ 3,582,200$ |
| Fruit | $13.8 \%$ | $\$ 1,544,200$ |
| Baskets | $0.1 \%$ | $\$ 11,200$ |
| Nursery stock | $2.6 \%$ | $\$ 285,500$ |
| Cut flowers | $6.2 \%$ | $\$ 690,900$ |
| Eggs | $0.0 \%$ | $\$ 4,500$ |
| Bugs | $0.0 \%$ | $\$ 2,200$ |
| Seafood | $4.8 \%$ | $\$ 538,800$ |
| Nuts | $1.3 \%$ | $\$ 144,500$ |
| Dried fruit | $0.1 \%$ | $\$ 6,700$ |
| Jams/jellies | $4.3 \%$ | $\$ 478,000$ |
| Pickles | $1.4 \%$ | $\$ 159,300$ |
| Roasted chilies | $0.1 \%$ | $\$ 15,700$ |
| Butter | $0.3 \%$ | $\$ 38,100$ |
| Cheese | $6.1 \%$ | $\$ 680,800$ |
| Ice cream | $0.0 \%$ | $\$ 1,100$ |
| Meat | $7.7 \%$ | $\$ 862,100$ |
| Bakery | $13.1 \%$ | $\$ 1,462,500$ |
| Sauces | $2.1 \%$ | $\$ 239,000$ |
| Spices | $0.0 \%$ | $\$ 2,200$ |
| Fresh pasta | $2.1 \%$ | $\$ 239,000$ |
| Wine | $1.9 \%$ | $\$ 208,300$ |
| Total | $100.0 \%$ | $\$ 11,196,900$ |
| Sota |  |  |

Source: Portland Farmers Market, tabulated by Bonnie Gee Yosick LLC.
Representing nearly one-third of the value of all products sold, fresh vegetables are a primary driver of the farmers market, as shown in Table 6. Fresh vegetables were followed by fresh fruit, bakery items, meat, cut flowers, and cheese in terms of dollar volume of goods sold. Together, vegetables and fruit account for nearly half of total market sales, applying the nearly $\$ 11.2$ million estimated sales at 14 Portland-area farmers markets in 2007 suggests over $\$ 5.1$ million in fruits and vegetables, which represents just under 3 percent of the total consumer spending on fruits and vegetables for the entire Multnomah County trade area.

## Demand for Farmers Markets is Growing Faster than Population

It is clear that market demand for farmers markets if growing. Part of this growth is caused by population growth as an increasing population will naturally experience an increase in food purchases. Though data are not available for all markets, it is clear that recent increases in local farmers market sales are growing much faster than population. Weekly market purchases doubled (or nearly doubled) for the two markets providing historical data:

- Hillsdale: Weekly market purchases have nearly doubled over the past five years (2002 to 2007): from \$36,100 to \$70,000.
- Hollywood: Weekly market purchases have doubled (2000 to 2007): from $\$ 30,000$ to $\$ 60,000$.

Shopper surveys consistently show the growing attendance in Portland’s farmers markets is driven by consumer interest in fresh, quality products offered by local growers. Market goers are self-described as "food conscious" - but now reflect a cross-section of the population.

During the same time period, Portland and Multnomah County saw only modest population growth. According to the Portland State University Population Research Center, the population of the City of Portland increased 7.4 percent from 529,121 in 2000 to an estimated 568,380 in 2007. Multnomah County experienced a similar scale of growth, increasing from 660,486 to an estimated 710,025 . Additionally, it is noteworthy that most of the areas served by existing farmers markets are largely built-out.

## Implications for Market Demand for Farmers Markets

Portland farmers markets sold an estimated $\$ 11.2$ million in 2007. The market for fruits and vegetables by Multnomah County households totals in aggregate over $\$ 187$ million. Given the vendor and product mix being sold in Portland farmers markets, these data suggest that Portland farmers markets currently capture about three percent of aggregate household spending on fruits and vegetables. As population growth is modest and areas served by farmers markets are relatively built-out, future growth in farmers markets is reliant on markets’ ability to capture increased spending by appealing to consumers’ interest in fresh, locally-grown produce and other unique products.

To capture more local food spending, farmers markets might increase their sales volume using a variety of approaches:

- More customers:

Farmers markets may be able to attract additional customers through existing markets and vendors.

- More purchases:

Farmers markets may be able to increase per-customer purchases of existing customers, exploiting synergies of goods provided, mix of vendors, or other means.

- More expensive items:

Farmers markets may be able to increase food spending by shifting existing customers' purchases to more expensive items (for example: meats, cheese,
wine), through vendor mix, marketing and pricing strategies, or other means.

## - More markets:

Farmers markets may be able to attract new customers through creation of additional markets. The consultant team's recent analysis suggests there may be three or more underserved (i.e., market deficient) areas in Portland. (It should be noted these underserved areas include lower income neighborhoods where it may be more difficult to support a new farmers market).

The appropriate approach for expanding the capture rate of farmers markets will depend on the supply of quality growers, degree of coordination between markets, the level of City involvement, and many other factors.

So what is reasonable potential capture rate for farmers markets? According to customer surveys conducted at the Hollywood Farmers Market, some customers report spending up to one-quarter of their weekly food budgets at the market. It is likely that this 25 percent capture rate would only be feasible during the summer season. But, if farmers markets were able to capture 20 percent of the annual aggregate spending of Multnomah County households on fruits and vegetables, markets would be selling over $\$ 37.5$ million in fruits and vegetables. Doing so while maintaining the current mix of products by sales volume suggests total sales of over $\$ 80$ million in farmers markets-a seven-fold increase in the 2007 estimated volume of $\$ 11.2$ million. Increasing the annual market share of Portland's farmers markets to 10 percent would yield fruit and vegetable sales of $\$ 18.8$ million annually and total market sales of $\$ 40$ million (see Table 7 below).

Table 7
Portland Farmers Markets: Potential Market Sales

| Vegetable \& Fruit <br> Sales | Market Share | Total Market Sales |
| :---: | :---: | :---: |
| $\$ 5.1$ million | $3 \%$ | $\$ 11.2$ million (2007 actual) |
| $\$ 18.8$ million | $10 \%$ | $\$ 40$ million (estimate) |
| $\$ 37.5$ million | $20 \%$ | $\$ 80$ million (estimate) |
| $\$ 187$ million* | $100 \%$ |  |
| *2007 aggregate vegetable and fruit purchases-Multnomah County households |  |  |

Emerging economic forces such as increased fuel costs will also affect both farmers market vendors and buyers. On the vendor side, rising fuel costs will increase farmers' costs to harvest and transport their products, which will translate to increased prices. But price hikes may be even steeper for food suppliers shipping products from outside the
region. How rising fuel costs will affect customer demand is not clear: customers may be drawn to purchase items locally-produced; however, some shoppers may also combine trips and purchase more each trip by shopping at a big-box store or one-stop shopping center.

## Other Market Demand and Supply Considerations

Examining quantitative aspects of demand and supply is only part of the analysis. There are also a number of qualitative considerations that require local knowledge and insight about the market being addressed in other analyses being produced by the Farmers Market Collaborative consultant team.

- Competitiveness of Existing Stores in Trade Area:

Are existing stores providing the merchandise and service local shoppers demand? If local grocers offer good quality, freshness and convenience, it will be harder for farmers markets to increase their market share.

- Vendor Mix Analysis:

This analysis focuses on the fresh produce component as the primary driver of farmers markets. Farmers markets are largely anchored by fresh vegetables and fruit, accounting for around half of all market sales. The consultant team's report on "Characteristics of Successful Markets" addresses other issues related to the crucial balance and mix of market vendors.

- Competitiveness of Existing Stores Outside of the Trade Area:

Do surrounding communities with big-box, or warehouse club stores siphon business out of the trade area? As fuel prices continue to increase, consumers who shop big-box stores just outside the City of Portland may actually purchase more during each visit to justify the drive.

- Consumer Behavior and Trends:

Are purchases driven more by convenience or comparison shopping? It may be particularly difficult for farmers markets to capture a greater share of consumers who place a high premium on convenience or who are particularly price sensitive.

The quantitative comparison of aggregate food spending and farmers markets current sales provides an initial measure of market opportunities (i.e. demand greater than supply). However, demand and supply must be analyzed in combination with many other market considerations.

As of 2004-2005, Multnomah County households spent an aggregate of nearly \$188 million on fruits and vegetables for consumption at home. With aggregated sales in 2007 of about $\$ 11.2$ million among the 14 farmers markets in Portland, and with vegetables and fruit representing about half of the total market sales, there appears to be abundant
opportunity for increasing sales and market share. As described above, strategies to increase sales might include attracting more customers, increasing purchases from existing customers, shifting purchases to more expensive items, lengthening individual market seasons, and developing new markets in underserved areas.

This analysis is based on the number of estimated households in Multnomah County in 2005. Not only is there projected to be an increase in the number of households in the County, but changing regional policies could also result in increased densities along key travel corridors and at town center locations. Therefore, this analysis - based on the estimated number of households in 2005 - is likely to be conservative.

