



## How Farmers Markets Can Promote Access to Healthy Food

### A Look at How Population Groups and Farmers Markets Interact

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Promoting farmers markets is one way to increase access to fresh, healthy food (1). Improved access to fruits and vegetables has been associated with healthier diets and lower body weights (2-4). Access to fresh fruits and vegetables in many low-income areas can be limited due to the absence of supermarkets and other retail outlets (2).

Washington State [WA State] and King County actively encourage the use of farmers markets by low-income consumers through the Senior Farmers Market Nutrition Program and the WIC Farmers Market Nutrition Program. The acceptance of Supplemental Nutrition Assistance Program (SNAP) electronic benefit transfer (EBT) cards at farmers markets is also encouraged. The passage of the Local Farms - Healthy Kids bill by the WA State legislature in 2008 played a big role in promoting SNAP EBT use. This bill provided select farmers markets with funding for wireless devices that processed these EBT cards (1). The hope was to enhance access to healthy, local produce by lower income groups.

This report provides information on the accessibility of farmers markets in WA State and King County, in terms of their locations and times of operation. Data from the Washington State Farmers Market Association (WSFMA), including the 2009 Annual Membership Application, were provided (5). Measures included market location, market days, market hours, market age, gross reported sales (2008), and farm vendor reported sales (2008).

#### Access to Farmers Markets

According to the WSFMA, in 2008 there were 104

farmers markets in Washington State that were members of the association (Exhibit 1). Exhibit 2, a map of WA State shaded by county population highlights differences in annual hours of farmers market operation across the state. State farmers market hours of operation were proportional to population in 2008. In particular, the presence of the historical Pike Place Market in King County placed the county well above all other counties for hours of operation.

Of the 104 WSFMA markets identified, 29 were in King County. Exhibit 3 shows the distribution of these markets (Pike Place Market excluded) within King County census block groups shaded by median household income. All markets established south of downtown Seattle and Mercer Island were considered to be in south King County. Using this definition, there were twenty farmers markets in the more affluent north King County (excluding Pike Place Market) and only seven in south King County (excluding Vashon Farmers Market). A more detailed look, however, indicated that farmers markets were often located in low-income pockets within affluent areas. This may be due to the availability of space, lower land-use costs, the presence of retail centers, or more walkable communities.

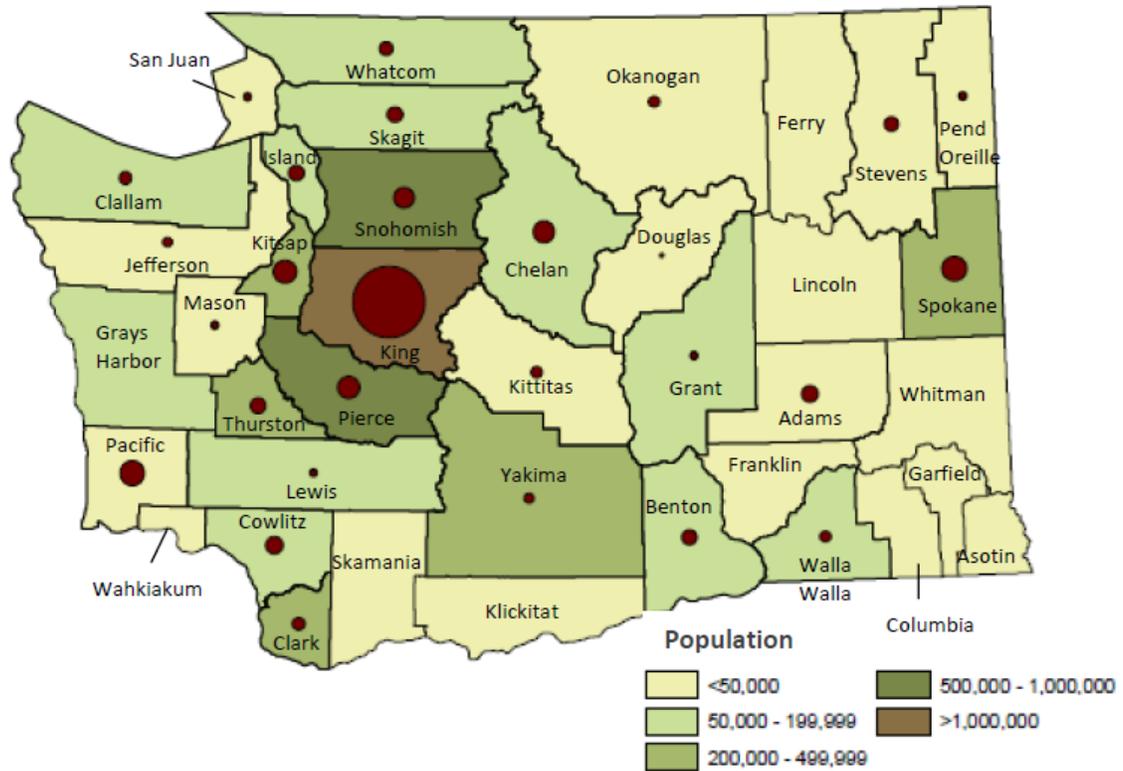
Washington State farmers market hours of operation were proportional to population.

**Exhibit 1 – Washington State’s Farmers Market Characteristics (2008)**

Market Characteristics	Washington State	King County
Markets	104	29
Market Days	2,971	1,095
Market Hours	15,255	6,663



## Exhibit 2 – Washington State Farmers Markets (2008)



\* Circles are proportional to annual hours of farmers market operation per county.

### Farmers Market Success

Gross reported sales, farm vendor reported sales, and market age were each used as success indicators. Markets located in the less affluent south King County were compared to those in north King County. South King County markets included the Burien Farmers Market, SeaTac Sunday Farmers Market, Des Moines Waterfront Farmers Market, Kent Farmers Market, Renton Farmers Market, West Seattle Farmers Market, and the Columbia City Farmers Market. The Vashon Farmers Market was excluded due to its unique geographic location. Pike Place Market was examined separately due to its existence as a historical market and its high number of market hours per year.

In 2008 markets in north King County averaged higher gross reported sales and farm vendor reported sales than south markets (Exhibit 4). Higher sales suggest greater farmers market success.

While north King County markets averaged greater reported sales, they also tended to be newer (Exhibit 4). New markets are often considered less stable

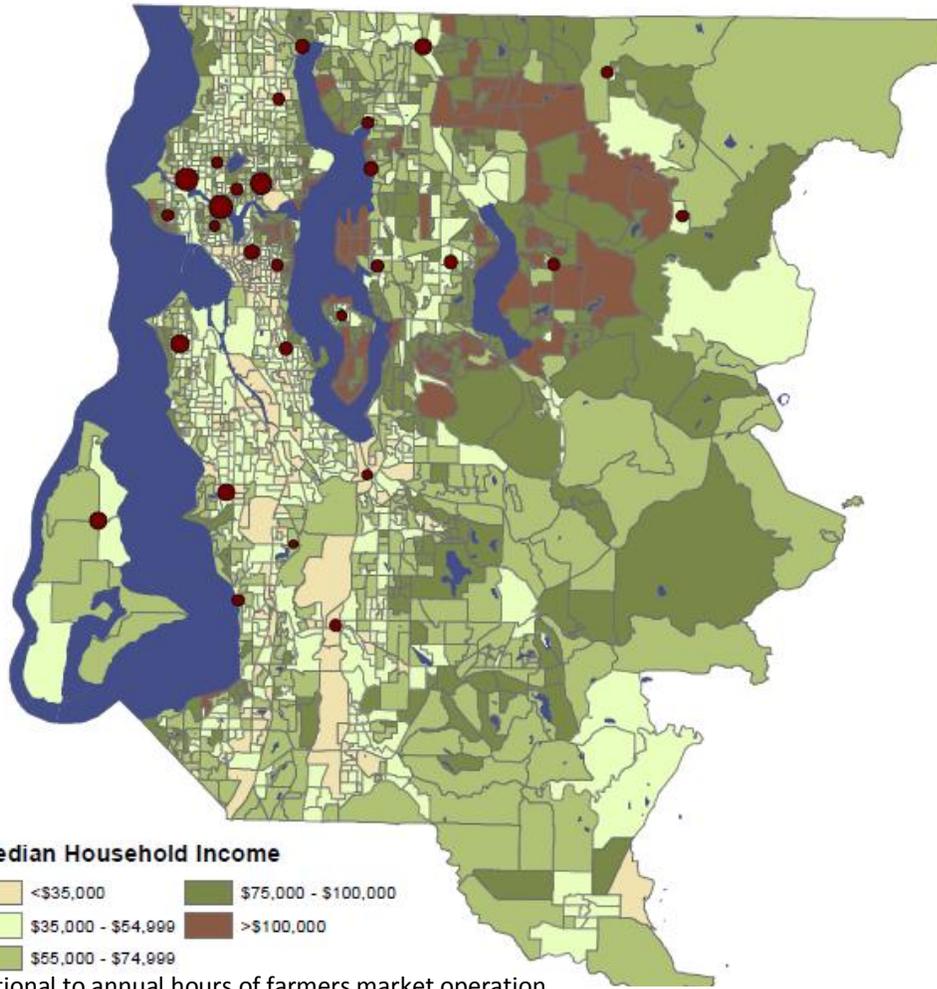
and therefore less successful. The presence of more established markets in south King County suggested that this region contained the more successful markets. However mere longevity may not be an appropriate measure of success. It is possible that new markets were more frequently created in the north compared to the south parts of the county due to greater economic demand. As of 2008 north King County had thirteen farmers markets five years old or younger while south King County had only two.

### Farmers Markets and Surrounding Populations

No one knows how far people are willing to travel to shop at a farmers market. A greater understanding of customer base will be instrumental in strategic farmers market planning. The costs and benefits farmers markets bring to the environment, agricultural community, and the neighborhoods they serve also needs to be understood. A three year research project is currently underway by the Washington State University Small Farms Program and Farmers Market Action Team (6). It will greatly contribute to



**Exhibit 3 – King County Farmers Markets (2008)**



\* Circles are proportional to annual hours of farmers market operation.

**Exhibit 4 – King County Farmers Market Characteristics (2008)**

Market Characteristics	Pike Place Market	North* King County	South* King County
<b>Markets</b>	1	20	7
<b>Market Days</b>	362	523	171
<b>Market Hours</b>	3258	2476	773
<b>Median Market Age</b>	102	4	8
<b>Median Gross Reported Sales</b>	-	\$318,293	\$161,000
<b>Median Farm Vendor Reported Sales</b>	\$2,000,000**	\$234,939	\$120,000

\* Vashon Farmers Market was excluded from south King County data. Pike Place Market was excluded from north King County data.

\*\*This figure is an estimate only. Provided by James Haydu Director of Communications & Marketing Pike Place Market Preservation Development Authority.

our understanding of farmers markets and their role in improving healthy food access.

**Barriers to Farmers Markets**

A recent report by the King County Agriculture Program noted that while farmers markets are growing in King County there remain numerous barriers to their success (7). While farmers markets have the potential to provide access to healthy food in low-income communities they must first be able to establish themselves as a successful business. Research is needed to determine how many farmers markets a population can support. Too many farmers markets and the customer base will be spread too thin. In addition the ability of farmers to meet the needs of more farmers markets needs to be considered.



Expanding the customer base for local produce at farmers markets is critical for farmers market expansion. One barrier to reaching all economic groups, particularly the low-income population is the belief that farmers market produce is more expensive than that available at supermarkets (8). Furthermore, the ability of farmers markets to access electricity and phone lines to operate SNAP EBT, credit, and debit card transactions remains a barrier that many farmers markets face (7). These obstacles must be overcome for farmers markets to expand their customer base to include a greater number of low-income individuals and families.

### Public Policy Implications

The use of farmers markets to increase healthy food access in low-income communities will be a delicate balancing act. New markets will need to create a new customer base rather than drawing from current shoppers at existing farmers markets. The ability of farmers markets to accept SNAP EBT cards will be critical if low-income populations are to be reached. Recent results of the Washington State Farmers Market Technology Improvement Pilot Program indicate that such technology increased the use of Basic Food dollars at Washington State farmers markets by over 300% (9). As such, future public policy decisions need to include greater provisions for markets to utilize EBT technology. This need has been highlighted in the King County Comprehensive Plan and by other groups such as the King County Agriculture Program and the King County Food and Fitness Initiative (7,10). It will remain an important area of outreach if farmers markets are to be used to improve food access in low-income communities.

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For more information about the University of Washington Center for Public Health Nutrition, please visit <http://depts.washington.edu/uwcphn/>

### References

1. Local farms - healthy kids (HB 2797 / SB 6483). Priorities for a Healthy Washington: Washington Environmental Council, 2008.
2. Truhaft, S., Karpyn, A. The grocery gap: who has access to healthy food and why it matters. Policy Link 2010, The Food Trust. Available at: <http://www.thefoodtrust.org/pdf/GroceryGap.pdf>. Accessed July 1, 2010.
3. Giang, T., Karpyn, A., Laurison, HB., Hillier, A., Perry, RD. Closing the grocery gap in underserved communities: the creation of the Pennsylvania fresh food financing initiative. J Public Health Manag Pract 2008;14(3):272-279.
4. Rose, D., Richards, R. Food store access and household fruit and vegetable use among participants in the US food stamp program. Public Health Nutr 2004; 7(8):1081-1088.
5. Washington State Farmers Market Association. Unpublished membership data, 2009.
6. Ostrom, M., Goldberger, J., McCracken, V., Garcia-Pabon, J. Agriculture Food Research Initiative of the National Institute of Food and Agriculture, USDA. Grant Number WNP06230. Engines of the new farm economy: assessing and enhancing the benefits of farmers markets for small and mid-sized farms and communities, 2009.
7. King County Agriculture Program. Farmers market report, 2010. Available at: <http://your.kingcounty.gov/dnrp/library/water-and-land/agriculture/farmers-markets/farmers-market-report-final.pdf>. Accessed June 4, 2010.
8. Neighborhood Farmers Market Association. Are farmers markets really more expensive, 2010. Available at: <http://www.seattlefarmersmarkets.org/ripe-n-ready/are-the-farmers-markets-really-more-expensive>. Accessed July 29, 2010.
9. Washington State Department of Social and Health Services. Farmers market technology improvement pilot program, 2009. Available at: <http://www.wafarmersmarkets.com/news/FarmersMarketTechPilotLegReport2009.pdf>. Accessed June 8, 2010.
10. King County. King County comprehensive plan, 2008. Available at: <http://www.kingcounty.gov/property/permits/codes/growth/CompPlan/2008.aspx>. Accessed June 8, 2010.

