Bridging the Gap: Do Farmers’ Markets Help Alleviate Impacts of Food Deserts?

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BRIDGING THE GAP: DO FARMERS’ MARKETS HELP ALLEVIATE IMPACTS OF FOOD DESERTS?

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Project Goal:

Federal food assistance programs (SNAP, WIC/Senior, FMNP) have the potential to influence behavior and improve health. This study addresses access and constraints to access from a spatial perspective with a particular focus on farmers' markets, as they are embedded in local food systems.
Project Objectives:

• Quantify the utilization of federal food assistance programs at farmers’ markets.
  ▪ Identify variability based on market location (Urban and Rural).
• Evaluate the extent by which farmers’ markets alleviate or perpetuate traditionally conceived food deserts.
• Identify the site selection tendencies of farmers’ markets in relation to other food outlets.
• Evaluate whether farm security and food security are mutually achievable goals, particularly in rural and small market communities.
• Introduction to Farmers' Markets in Washington (Vicki)

• Mapping Markets and Assessing Access (Jeremy)

• Farmers’ Markets in Rural Washington: Conceptual to Reality? (Rayna)
Rural Communities and Rural Poverty

- Rural areas experience more poverty (USDA-ERS, 2007)
- Strongly tied to unstable economies (Gibbs, 1998)
- Persistent and long lasting (Tickamyer & Duncan, 1990)
- Rural families in poverty less likely to participate in government assistance programs (Lichter et al., 2003; Sherman, 2009)
Related Projects Throughout the State:

- **Engines of the New Farm Economy:** Assessing & Enhancing the Benefits of Farmers’ Markets for Small & Mid- Sized Farms & Communities

- Investigate the capacity of farmers’ markets to generate income for farmers, improve the environment, and provide assets to the communities.
- Identify barriers to participation for women, minorities, immigrants.
- Identify opportunities to enhance the benefits of markets: optimizing locations and times, strengthening community linkages, engaging new farmers.
Rapid Market Assessments
Understand the Impact of Farmers Markets in Local Communities and Throughout Washington State

Survey of Market Managers
Summer 2010

We appreciate your help with this study of Washington State farmers markets!

This survey is sponsored by the:

Small Farms Program
Washington State University

In collaboration with the Farmers Market Action Team

Market Manager Survey
To be followed up by a vendor survey next winter
Farmers’ Market Technology Improvement
A Program Of The Local Farms Healthy Kids Act

- Increase the number of SNAP recipients using benefits through EBT at farmers’ markets.
- Assisted 20 markets in developing the capability to accept wireless electronic payments.
- In 2009 these markets grossed $231,784.23 through POS machines.
- 50% credit, 34% debit, 16% EBT.
- This was despite significant issues with the processor.
### Pilot Market Geographic and Sales Information

<table>
<thead>
<tr>
<th>Market Description</th>
<th># of Markets</th>
<th># EBT of Transactions</th>
<th>Total EBT Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previously Certified</td>
<td>6</td>
<td>500</td>
<td>$8,839.00</td>
</tr>
<tr>
<td>Newly Certified</td>
<td>14</td>
<td>1035</td>
<td>$22,141.51</td>
</tr>
<tr>
<td>Urban</td>
<td>11</td>
<td>1215</td>
<td>$25,398.00</td>
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<tr>
<td>Rural</td>
<td>9</td>
<td>320</td>
<td>$5,582.51</td>
</tr>
<tr>
<td>Western WA</td>
<td>14</td>
<td>1311</td>
<td>$27,307.00</td>
</tr>
<tr>
<td>Eastern WA</td>
<td>6</td>
<td>224</td>
<td>$3,673.51</td>
</tr>
</tbody>
</table>

1 Sales period is May 1, 2009 through August 31, 2009

Farmers Market Technology Improvement Pilot Program Report to the Legislature November 15, 2009

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We Accept: Food Stamps (EBT) Visa and Mastercard Ask us how!
What do we already know?

• Access to supermarkets is a problem for a small percentage of households.

• Supermarkets have lower prices than smaller stores.

• Low-income households shop where food prices are lower, when they can.

• Market conditions contribute to food access.

• Economies of Scale, Scope, and Agglomeration...
2008 Farm Bill defines a food desert as an:

“area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower income neighborhoods and communities”

(Title VI, Sec. 7527) (USDA, 2009)
Population needed to maintain a grocery store is increasing... (O’Brian, 2008)

- Declining population
- Employment patterns
- Changing purchasing patterns
Further Defining Food Deserts:

- Two different phenomena taking place:
  - Urban
    - Use a 1 km walking distance (Euclidean)
  - Rural
    - Use a 10 mile (16.1km) Network distance

- Tracts in excess of this distance are considered low access.
- Those that additionally have a poverty rate in excess of 20% are deemed 'Food Deserts'.

\[
T_i = \frac{\sum_{k \in i} b_k (\min |d_{kj}|)}{\sum_{k \in i} b_k}
\]

- \(T_i\) = pop weighted accessibility for the tract neighborhood \(i\)
- \(b_k\) = total pop of block group \(k\)
- \(d_{kj}\) = distance between block \(k\) and retail source \(j\)
Can/ Do Farmers’ Markets step in and fill ideological and geographic gaps?

• What is the rationale for their periodicity?
  • Does it produce a different distribution than does the fixed retail?

• Do all consumers equally benefit?
  • We have seen a large proliferation of farmers’ markets in the last decade.

Source: Washington State Farmers Market Association
Washington Farmers Markets
Number by Day of the Week, 2010

Monday: 0.5%
Tuesday: 6%
Wednesday: 16%
Thursday: 14%
Friday: 10%
Saturday: 40%
Sunday: 13%

Data Collected with much help from Colleen Donovan
2009
Gross > $200K
WIC=$244
Senior=$1734
2009
Gross > $250k
WIC = $30,808
Senior = $29,788

2009
Gross > $450k
WIC = $10,204
Senior = $16,618
Gross > $25K
WIC = $3,376
Senior = $2,904

4x the farm sales
6 times the farmers
WIC = $3,884
Senior = $6,076
<table>
<thead>
<tr>
<th></th>
<th>FD Markets (n=21)</th>
<th>Non-FD Markets (n=149)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2010</td>
</tr>
<tr>
<td>Accepted WIC/Senior FMNP</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Accepted EBT</td>
<td>5</td>
<td>34</td>
</tr>
<tr>
<td>WIC/Redeemed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>$22,882.40</td>
<td>$16,103.00</td>
</tr>
<tr>
<td>Max</td>
<td>$55,940.00</td>
<td>$45,374.00</td>
</tr>
<tr>
<td>Min</td>
<td>$192.00</td>
<td>$304.00</td>
</tr>
<tr>
<td>Senior/Redeemed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>$17,298.80</td>
<td>$14,059.00</td>
</tr>
<tr>
<td>Max</td>
<td>$33,838.00</td>
<td>$30,066.00</td>
</tr>
<tr>
<td>Min</td>
<td>$288.00</td>
<td>$700.00</td>
</tr>
<tr>
<td>Average Weeks per Year</td>
<td>n=15*</td>
<td>n=129*</td>
</tr>
<tr>
<td></td>
<td>22.92</td>
<td>22.10</td>
</tr>
<tr>
<td>Average Number of Farmers</td>
<td>n=6*</td>
<td>n=78*</td>
</tr>
<tr>
<td></td>
<td>19.33 (R=6-70)</td>
<td>21.1 (R=2-90)</td>
</tr>
<tr>
<td></td>
<td>UA</td>
<td>UC</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Total Number of Markets</td>
<td>94</td>
<td>37</td>
</tr>
<tr>
<td>Number of Markets Accepting WIC/Senior FMNP</td>
<td>62</td>
<td>25</td>
</tr>
<tr>
<td>Average number of Vendors accepting WIC/Senior FMNP</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Average WIC ($) per market</td>
<td>$10,575.10</td>
<td>$4,993.04</td>
</tr>
<tr>
<td>Average Senior ($) per market</td>
<td>$8,345.84</td>
<td>$3,419.68</td>
</tr>
<tr>
<td>Total WIC</td>
<td>$655,656.00</td>
<td>$124,826.00</td>
</tr>
<tr>
<td>Total Senior</td>
<td>$517,442.00</td>
<td>$85,492.00</td>
</tr>
</tbody>
</table>

3 are located in a Food Desert...none take WIC/Senior Vouchers
‘Interim’ Observations:

• Industry and population are highly uneven across space. Retail accessibility mirrors this.

• Despite the dialogue of a new ethic with local foods, they (market managers and vendors) still face economic constraints.
  - Most farmers have a limited number of markets from which they can participate.
    – Net returns must be at least part of the equation.
    – Does this leave the rural and smaller markets disadvantaged?
Farmers’ Markets in Rural Washington: Conceptualization to Reality?

• Choosing sites: The Horizons Program
  ▪ Goal to reduce poverty in northwest rural communities (The Northwest Area Foundation & WSU Extension)
  ▪ 40 communities in Washington State
    – Less than 5,000 people
    – More than 10% poverty
  ▪ LeadershipPlenty! and Study Circles
    – 16 of 40 identified food security issues

“We don’t have homeless people, no one is sleeping under the overpass.”

Helen, County Extension Director on community members' initial beliefs about poverty in their rural community
Criteria for Inclusion

• Explicit identification of food security issues
• Farmers' market as at least part of solution
• Variation on demographic, geographic, economic, and social characteristics
Independence Valley

• Population of about 2,000
• 93 percent white
• 60 percent free/reduced lunch rate
• Decreasing school enrollment, increasing elderly population
• Access to ‘good food’ for low-income
  • Sought to accept WIC and Senior Vouchers and SNAP/EBT
Ferris- Border Ridge

• Population of about 2,700
• Rapidly growing Latino population
• 42 percent free/reduced lunch rate
• Access issues
  • Only one small grocer in Border Ridge
  • Other options an hour away

Primary options to solve food insecurity were through community gardens.
• Help the food bank
• Serve as an anchor for a Farmers’ Market

[Image of Ferris- Border Ridge town]
Kingsville

- Population of about 1,800
- Large majority (78 percent) identifying as Hispanic
- 80 percent free/reduced lunch rate
- Access and economic issues
  - Increase access through WIC/Senior FMNP and SNAP/EBT
  - Farmers and consumers travelling 23 miles to a nearby town's farmers' market
  - Wanted to keep those dollars and human capital in 'their' town
Barriers to Increasing Access in Independence Valley: Emerging themes

1) Timing of and pricing at the market
   - Avoiding competing for vendors
   - Time is inconvenient for people who work traditional hours
Barriers to Increasing Access in Independence Valley: Emerging themes

2) Food benefit system management
   - Highly motivated
SNAP/ EBT

Jeremy: Do you think there’s enough people in town that would be wanting to use [SNAP/EBT]?

Absolutely. Absolutely. I think 30 percent of our sales would come through SNAP/EBT. Plus, the crowd that we wanna get to, in terms of feeding people better food... You know, that’s the right way to do it.
Barriers to Increasing Access in Independence Valley: Emerging themes

2) Food benefit system management
   - Highly motivated
   - Managed the WIC/Senior FMNP
     • 10% of gross farmer sales, 2010
There’s a whole series of hoops the market has to jump through, which I don’t agree with AT ALL. And there was a little class they had for us...tellin’ us, “Well, the seniors can’t buy this, but the uh, WIC people can. The WIC people can’t buy this, but the seniors can.”

Stan, Market Manager
2) Food benefit system management
   - Highly motivated
   - Managed the WIC/Senior FMNP
     • 10% of gross farmer sales, 2010
   - But call last year's attempt to get SNAP/EBT up and running "a failure."
SNAP/EBT Snags in the System

- Tax identification and non-profit status
- Tax codes and regulations
- Charges for transactions

"It's all about cashflow, because we don't have an amount of money ahead of time. We don't have a savings account. We might be sunk before we're sunk and you can't get in trouble with SNAP/EBT people because it's the federal government and they have the power to crush you if they choose." - John, Market President
Barriers to Increasing Access in Independence Valley: Emerging themes

3) Volunteer time and knowledge

Jeremy: So, have you guys looked at the state market association for help?

John: They don’t have any help. There is another project this year. But, the overhead involved for a grant like that is, probably more than the work we have. We already have the hardware, we can’t do more than what we’re already doing. It comes down to it.
What’s next?

• Observe the market day(s) and more discussions with participants
  ▪ Independence Valley's Market Opens on May 20th
  ▪ Ferris-Border Ridge Market Opens in June
  ▪ Kingsville Market Opens in July

• Similar case studies are being done in non-Horizons settings this summer.
Concluding thoughts and more of what’s next:

- The goal here, and with the other co-occurring projects, is to help inform the means by which farm and food security ("win-win") can be achieved throughout the state.
  - Markets must be sustainable
  - Farmers must be viable
  - Consumers must have access

- Next step is to utilize the information detailed here in conjunction with the information from the Market Manager Survey in a modeling context
  - Better gauge of market quality
  - Understand what makes markets attractive to low-income consumers
Dependency perceived as a moral standing issue: Work Ethic

Stan: I’m a firm believer in just being able to pull your pants up, get out and go to work. You gotta do something ‘cause there’s gonna be people around here that...and they gonna take whatever you got because they’re too lazy to do it their selves.

Jeremy: So what is the work like up here for most people?

Stan: Oh, there’s not much work up here [quickly spoken].
Work Ethic of People Dependent on Government/Community Assistance

Well, we could bend this regulation or bend this one and next thing you know, everybody’s doin’ the same thing. I see people I know can work on disability comin’ into the food bank... How do ya stop that? You can’t say “Okay, that’s it. You can’t have any more food.” Probably what you should do because half of those are gonna say okay. My free ride is over. I’m gonna have to...

Sandy, Food Bank Volunteer