

Measuring Effects of Mobile Markets on Healthy Food Choices
Report of Focus Group Results
Freshmobile, Madison, WI
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Project Overview

To expand marketing of agricultural products, the US Department of Agriculture (USDA) Agricultural Marketing Service (AMS) funds mobile produce markets in low-income food deserts where access to fresh produce is limited. The purpose of this research project is to (1) understand who does and who does not use mobile markets and why and (2) investigate whether mobile produce markets facilitate healthy food choices in those communities, and if so, how. The focus group study involves four sites served by USDA AMS funded mobile produce markets. At each site, two focus groups are conducted: one with food shoppers who use the mobile markets and one with those who do not. The research questions include: why do people use or not use the mobile market? What factors facilitate or impede use? How does the presence of a mobile food market affect food access and choices? Are there spillover effects on food choices at other venues?

Study Site in Madison, WI

Freshmobile is a 501c 3 non-profit that runs a mobile market based in Madison, WI. Begun in Fall 2011, Freshmobile is unique in that its founder, Jeff Maurer, is also an owner of an independent grocery store, Fresh Madison Market. This provides the mobile market with an access to both physical infrastructure and crucial business services and knowledge, such as cold storage, bulk ordering, accountant services, and knowledge about the grocery business. Mr. Maurer was inspired to create Freshmobile after meeting a child who had never tasted a blueberry through his work with underprivileged children at the Boys and Girls Club. Mr. Maurer visited Chicago's Fresh Moves mobile market to learn about how to design a mobile market program and worked with the City/County Health Department, Madison's Mayor's office and the Dane County Executive's Office to identify food deserts.

Freshmobile owns a brightly colored truck featuring images of fruits and vegetables that is retrofitted to accommodate shelves with crates of fresh produce, as well as other staple foods (flour, cereal, tortillas). In addition, the truck has coolers for milk, juices, butter and other foods that need to be refrigerated. Customers enter at the back and pay at the cash register at the front. Freshmobile accepts cash, credit and debit cards, WIC and SNAP cards. The Freshmobile serves predominantly neighborhoods in South and North-East Madison.

South and North-East Madison consists of several neighborhoods that are classified as food deserts by the USDA (USDA, 2013). The study site was in the Waunona neighborhood, which consists of both very affluent households (located on the lake Monona shore) and low-income

households. When compared to the City of Madison, Waunona has almost two times the African American population and more than two times Hispanic/Latino population (Table 1). The Median Household Income is about the same as that of the City of Madison due to the mix of high-income and low-income households. Another neighborhood served by the Freshmobile, Bram’s Addition, is 34.7% African American (five times larger than Madison), 12.2% Asian (two time larger than Madison) and 24.9% Hispanic/Latino (three and a half times larger than Madison). The Median Household Income is less than a half of that of Madison. Unfortunately, unemployment data are not available on the neighborhood level (City of Madison, 2012). While the areas are classified as food deserts, there are some ways to obtain fresh produce. For instance, Waunona has a Wal-Mart that offers fresh produce and several participants mentioned local farmers’ market that runs in the summer.

Table 1: Data from Madison Neighborhood Indicators project for selected neighborhoods

Neighborhood	African American	Asian	Hispanic/Latino	Median Household Income
Madison	7.1%	7.3%	6.9%	\$57,124
Waunona	13.9%	4.2%	16.2%	\$58,284
Bram’s Addition	34.7%	12.2%	24.9%	\$27,159

Source: City of Madison, 2012

The Freshmobile regularly serves 10 stops from Monday-Saturday (Figure 1) (Freshmobile, n.d.). The truck stays at each stop for three hours; the times are either 10 am – 1 pm or 3 pm – 6 pm. From 1 pm to 3 pm the truck returns to the Fresh Market to restock. Two of the stops (including the site where this study was conducted) are visited twice a week, the rest of the stops are visited once a week.

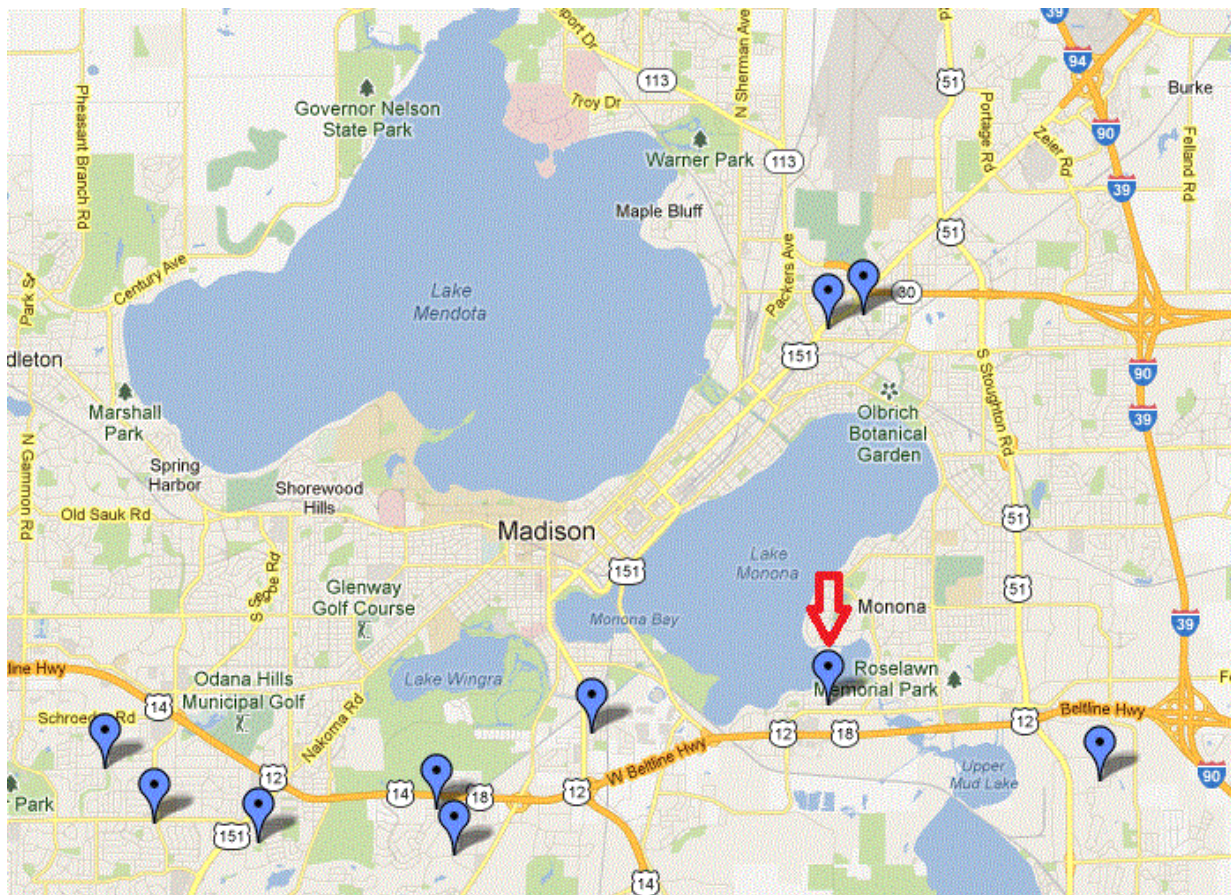
Focus Group Recruitment and Process

Focus groups are particularly useful for understanding why people do what they do. They involve asking a series of open-ended questions to a group of individuals. It should be noted that given their small size, focus groups are not representative of the larger population; however, they do provide in-depth perspectives of individuals. In addition, they allow probing answers and asking follow-up questions.

For this study, two groups of participants were recruited: those who shop at Freshmobile and those who do not. The reason for this was to understand why people shop at Freshmobile, and why they do not. The shoppers were recruited with flyers placed in the Freshmobile truck; the driver was asked to distribute the fliers to customers. The non-shoppers were recruited using flyers posted at the Bridge Lakepoint Waunona (BLW) Neighborhood Center in Madison, WI. It should be noted that the Freshmobile staff was initially instructed to recruit in the Waunona neighborhood only; later, the recruitment was expanded to other stops as well. Snowball recruiting was also used; both groups of participants were encouraged to pass on information about the focus groups to people they knew. All participants contacted the researchers to request being included in the study and screened to ensure they were 18 or older and food shoppers.

Both focus groups were conducted in a conference room at the BLW Center between 4-6 pm; the group that shopped at the Freshmobile (shoppers) met on Monday, April 22nd, 2013, while those who did not (non-shoppers) met on Monday, April 29th, 2013. The moderator reviewed the informed consent protocol by first explained the purpose of the study to the participants, their role in it, explained the risks and benefits, provided contact information, asked for permission to record and quote the participants anonymously, and finally asked for oral consent to proceed. The participants then filled out a short survey asking about their fruit and vegetables shopping habits and consumption as well as household demographic information and incidence of food-related diseases. Participants were assigned a participant number so that survey and focus group responses could be linked. Each focus group session consisted of asking each participant to respond to a set of open-ended questions and was recorded. A graduate assistant took notes so that the transcribed recordings could be annotated. In the non-shoppers group, there were two participants whose primary or only language was Spanish. The moderator translated each question to Spanish for them and they responded in Spanish; the moderator then summarized their responses in English to the other participants.

Figure 1: Map of regular stops of Freshmobile in Madison, WI; the arrow points at the study site



Focus group participants were asked to describe a typical meal, their meal preparation goals, where they shopped and in particular where they shopped for produce. Participants who shopped at the Freshmobile (shoppers) were asked about their experiences: when and how they heard about the market, how often they shopped there and what they bought, whether these foods were available to them elsewhere, whether their meals or food choices elsewhere had changed since shopping there and how, what improvements they would recommend, the reputation of the market, and recommendations to encourage others to use it, as well as to eat more produce. Participants who did not shop there (non-shoppers) were asked whether they believed they ate enough fresh produce and whether they would prefer having more fresh produce available, what they knew about the market, whether the location and timing was convenient for them, why they did not shop there, the reputation of the market, suggestions for encouraging people to shop there and to eat more produce. The English portion of the recordings of the two focus groups were professionally transcribed, checked for accuracy by the researcher and graduate student, and annotated. The PI transcribed and translated the Spanish speakers' contributions. All names were replaced with numbers to protect the participants' anonymity.

Focus Group Results

Comparison of Shoppers and Non-shoppers

There were 10 participants in the shoppers group and 11 in the non-shoppers group. However, one of the non-shoppers had actually shopped at the Freshmobile and therefore the participant's responses were added to those of shoppers, leaving us with 11 shoppers and 10 non-shoppers.

We do not have information about household income; however, about half of each group use a SNAP card (7 shoppers, 4 non-shoppers; no significant difference at $P>0.05$). Households are eligible for SNAP cards if gross household income is no more than 130% of the poverty level. As a point of reference, approximately 14% of the US population receive SNAP benefits, indicating that our participants were more than three times as likely to use SNAP. Given there was no significant difference in the use of SNAP cards between the two groups, this would imply there was no difference in income between the two groups. While non-shoppers had a slightly larger households (2.0 vs. 1.8 adults, 1.5 vs. 1.0 children), the difference was not significant at $P>0.05$. Most of the participants were unemployed (only 2 shoppers and 3 non-shoppers were employed; no significant difference between the groups at $P>0.05$); however, more non-shoppers were students (4 vs. 0; $P>0.01$). Two of those who were students were also employed. With regards to the incidence of food-related disease in their households, there was no difference between the two groups of participants (total 5 shoppers and 4 non-shoppers; 1 of them said obesity, 1 heart disease, 1 food allergies and 2 diabetes, the rest was unspecified).

When asked about their fruit and vegetable consumption, neither group ate enough produce based on the USDA guidelines (5-9 servings per day). However, shoppers ate significantly more servings (2.5 vs. 1.3 servings; $P>0.01$). The number of servings appears to be congruent with participants' descriptions of their dinner the previous night: meat featured predominantly and/or baked beans and carbohydrates, 8 shoppers and 6 non-shoppers included vegetables (most often string beans, broccoli, greens or salad). However, despite the small number of servings, the non-shoppers believed that they were getting enough fruits and vegetables: out of the 10 participants, 7 said they ate enough fruit and vegetables, 2 said they did not have enough fruit (one due to

diabetes and one due to liking expensive and hence unaffordable fruit, such as berries) and only one participant said she did not eat enough (but added that her household in general does and that she is trying to do that too). When asked about whether they would like to eat more fruits and vegetables, three participants said they were not interested because they thought they already had enough. The rest of the non-shoppers were interested in eating more but they were constricted by the cost (2 participants), two participants indicated that they would be interested in fresh produce since most of their produce was frozen and canned, one participant would like to get over her health problems to be able to eat fresh produce and fruits, one indicated that his interest was mostly due to getting older and wanting to be healthier, and one participant said she would always be interested in more.

Most of the participants enjoyed cooking (always or sometimes); only one shopper did not like to cook. The two groups did not differ in the frequency of going grocery shopping: on average shoppers went 2.1 times every two weeks, non-shoppers 2.4 times (no significant difference $P>0.05$). There was no significant difference between the shoppers and non-shoppers in how far they lived from a grocery store and how far they lived from a Freshmobile stop; however, many shoppers and non-shoppers did not answer this question on our survey. However, the focus group discussion revealed that all non-shoppers indicated that the Freshmobile stops are at convenient locations, perhaps making them a shorter or at least equivalent distance to grocery stores.

Freshmobile Shopper Results

On average, shoppers consumed more fruits and vegetables than non-shoppers and the majority of them enjoyed cooking. When they discussed their goals when preparing a meal, four shoppers directly mentioned vegetables in their answer. The rest of the participants talked about the importance of taste (2), arranging a meal around meat (1), baking foods (to reduce fat for health reasons) (1), limiting salt and pepper (1). Two participants indicated goals related to social goals of eating: good company and saying grace. Four participants showed in their responses they were concerned about health.

The theme underlying most responses was affordability. It was clear that most participants were concerned with the cost of food. They often chose to shop at Wal-Mart because they perceived it to be cheap. In addition, participants shopped at other stores perceived to have low prices, most often Woodman's (the two Madison locations are 6 and 9 miles from the BLW Neighborhood Center).

While in general, the participants appreciated the convenience of the Freshmobile (4 participants), they were concerned about both price and quality. Nine participants mentioned cost was really important to them: they were looking for the cheapest produce and were interested in bargains. Quality was another issue: four participants wanted to see fresh fruit, three participants wanted more variety and two participants wanted more produce displayed so they could freely choose the best looking produce. Two participants related an experience that they either purchased bad produce or were told about such an experience by others. As a recommendation, two participants suggested that the staff on the Freshmobile should be allowed to cull the

produce so there is no bad produce or provide a discount on the produce that does not appear fresh anymore.

When asked about what would encourage more people in the community to shop there, the major themes were again cost and quality. Three participants would like to see lower prices (competitive with chain stores) and four participants would like to see promotions. Suggestions included having a purchasing card (similar to coffee shops, one would get a free purchase for a specific number of purchases) or having more accessible coupon offers (some participants mentioned the Thanksgiving offer of \$5 coupon for a \$10 purchase; however, they considered a \$10 purchase too expensive) or free samples (2 participants; one participant related a story how she appreciated a free sample and how it made her purchase produce). One participant suggested that more advertising is necessary because the community is not aware of the Freshmobile; two participants suggested that people might think that the Freshmobile is only meant for people who have a SNAP card.

A big obstacle in utilizing the Freshmobile appeared to be trust. Most of the participants heard stories about identify theft of SNAP or credit cards by businesses in general, but specifically by food trucks. They discussed people they knew who had fraudulent charges made to their SNAP or credit cards by unscrupulous food truck operators in the neighborhood. While no participant has heard anything specific about the Freshmobile, it was clear that there was a general distrust toward food trucks.

Most of the participants reported that the presence of Freshmobile did not change their purchasing or eating habits at other places. The exception was one participant who noted that the quality of a certain product improved her salad and another participant who suggested that there were some seasonal products that were not available elsewhere.

Freshmobile Non-Shoppers Results

The non-shoppers ate fewer serving of fruits and vegetables then shoppers; however, while the difference was significant ($P>0.01$), it was small (about 1 serving/person) and both groups were significantly below the USDA guidelines. Their small fruit and vegetables consumption was reflected in their responses to what was their major food goal: only one person mentioned vegetables in their answers. Most often, participants were concerned with having meat (5), and the rest of the participants cared about seasoning, ease of preparation, preparation itself and smell of food and providing variety of meals cooked with love.

Similar to the shoppers, the non-shoppers were primarily concerned with food cost. They shopped mostly in chain supermarkets (mostly Wal-Mart and Woodmans), indicating that they were hunting for bargains and using coupons for their purchases.

When asked about the Freshmobile, all but one participant said they have heard about it, most likely from the BLW Neighborhood Center or they saw it around. Only one participant has not heard about the Freshmobile before. Despite their own awareness, nine participants suggested that the Freshmobile would increase their sales if people were aware of its presence. Eight participants believed that more advertising was necessary; besides newspapers and flyers, they thought word of mouth and personal contact were important mechanisms in their community.

One participant explained that people do not check their mail and therefore would not find fliers but that direct contact would permit people to get their questions answered immediately rather than having to go to the Freshmobile to find out. One participant recalled his childhood in Chicago and the catchy slogans/songs the food trucks played there (this suggestion is similar to that made to FreshMoves: a catchy tune when the bus arrives could alert the neighborhood to its presence). Similarly to the shoppers, the non-shoppers also believed that good promotions (free products (4) and samples (1) that varied each week) would encourage more people to shop on the Freshmobile.

In general, the participants thought it was a really good project (4 participants) and one participant expressed that she was impressed with the fact that someone obviously cares about bringing healthy produce to people. The participants were very excited when they heard that the Freshmobile is a non-profit; to them it meant that someone cared for them. The shoppers, on the other hand, did not seem to understand that Freshmobile was a small non-profit, which could have led to some of the negative feelings about what they perceived was Freshmobile's failure to compete with discount stores on price.

When told about what the Freshmobile is and what services it provides, three participants expressed curiosity and indicated that they will immediately go to see for themselves. Indeed, when the focus group concluded the researchers observed several participants entering the Freshmobile and purchasing fresh produce. When exiting the Freshmobile, one participant made a comment that the product she purchased was cheaper than everywhere else. During the focus group discussion, one participant said that from the description given she would imagine the Freshmobile provides fresh produce for a good price, another participant thought it was very convenient. All participants but one said that there is a location that is convenient for them (which may be because most participants were recruited from the BLW Neighborhood Center community) and that the Freshmobile comes at reasonable times. Two participants liked having the Freshmobile come at two different times so that they could choose whichever one was more convenient. Only one participant commented that she would prefer that the Freshmobile come on the weekend due to being busy with work and school.

Conclusion

While the results pertain to a small group of participants and thus cannot be generalized, the comments and suggestions of the participants revealed some useful recommendations and insights. We did not find any significant difference in the demographics, cooking habits or distance from grocery stores between the shoppers and the non-shoppers; however, the shoppers ate on average one serving of produce more than the non-shoppers (still well below the recommended 5-9 servings/day). This suggests that having a convenient place to purchase produce can increase fruits and vegetables consumption.

The prominent themes in both focus groups were affordability and quality of produce. It is clear that both groups of participants had very limited budgets and were very concerned about price of food: they purchased most of their produce in large stores with reputations for low prices, mentioning using coupons or hunting for bargains and talked about not having enough money to buy produce. It was clear that lack of income prevented them from eating more produce, hence cost or price of produce was the biggest obstacle to purchasing more. The shoppers would like to

see the Freshmobile be more competitive with chain stores; for them the affordability was more important than convenience. The non-shoppers also felt that it is necessary that fresh produce be more affordable, otherwise, the community will continue purchasing canned and frozen food in chain stores. Both groups suggested that a promotion with low purchase levels (\$10 was perceived as too high) would bring more people in, as would providing coupons, specials, or having a purchase card similar to that in coffee shops.

From the shoppers' comments, it was clear that they did not understand the purpose of Freshmobile and did not know that it was a non-profit organization bringing food into food deserts. Many thought it was a for profit business, hence made comparisons of prices to Wal-Mart or Woodmans, and expressed negative sentiments if they thought the prices were not competitive. Making sure that the goal of the Freshmobile is known would be the key to bringing more people in: when the non-shoppers were told that Freshmobile was a nonprofit dedicated to improving access to fresh foods, they were impressed with its purpose and wanted to go and see it for themselves.

In addition, both groups were really concerned with quality of produce. Given their tight budgets, high quality produce is a key to ensuring that it lasts and they do not waste any. Those who had experience with Freshmobile suggested they would like to see more produce so they could choose what they liked most and would like to see more culling so that only the highest quality produce is available, and lower quality produce is offered for a lower price. Whether it is a perception or reality, it is absolutely essential to make sure that the produce truly is fresh. It appears that stories of produce that did not look that good can spread throughout the neighborhood and discourage some people from purchasing it. This can undermine the trust of the community and trust is absolutely essential for the success of the Freshmobile. A related aspect to building trust and perceptions of quality is to emphasize customer service: friendly, helpful service.

Last, it was very clear that many people in the community are not aware of the Freshmobile; particularly the non-shoppers were concerned that the community does not know about the Freshmobile. Since they felt that people in the community might not check their mailbox, they suggested that direct contact and word of mouth would be a better mechanism for spreading the word. Having a song played when the Freshmobile is arriving in its new location, together with a prominently displayed sign with rotating specials, free samples, having an employee or intern knock on doors, fliers denoting locations and times or offering coupons, are ways to attract the community to buy more produce at the Freshmobile. Cooking demonstrations are another strategy used by other mobile markets. A partnership with nutrition and health workers or students might be the most efficient way to conduct food demonstrations.

Given that the staffing of the Freshmobile is only one employee, one way to promote greater knowledge, community partnership and trust would be to have an intern or volunteer at each site from the community. If the person lived in the neighborhood and or was affiliated with the community center they could very effectively promote the message of Freshmobile and be an extra (and locally known) person who could knock on doors. It is essential that the person be outgoing and friendly. Job experience or payment in kind might be sufficient incentive for a couple hours of work a week. Donors might also be willing to sponsor an internship.

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