Access to healthy food is seen as a key determinant for addressing food insecurity. One innovative strategy to improving access to healthy food is by strategically placing mobile markets in under-served communities. Mobile markets are a type of non-traditional food retail outlet that offer fresh produce (and often staple goods) on a weekly, bi-weekly, or monthly basis. Mobile markets are typically non-brick and mortar establishments, and the portability of these markets enable them to serve multiple different geographic areas of a community.

Due to the relatively recent development of mobile markets, there is a lack of published literature and standardization across the various mobile market strategies being employed throughout the United States. Therefore, the City of Austin, Austin Public Health asked the University of Texas School of Public Health (UTSPH) Evaluation Team to conduct qualitative interviews with various groups around the country that are utilizing a mobile market model to better understand how they are conducting their operations, marketing, community feedback/involvement and evaluation.
Interview Tool

The interview guide was developed in collaboration with staff from Farmshare Austin and the Sustainable Food Center. The aim of the tool was to be able to better understand the processes that other organizations and entities use to better develop standards and suggestions to inform the mobile market program in Austin. Therefore, the tool guide was divided up into five sections: operations; marketing; product selection; community feedback and involvement; and evaluation. The tool was sent to representatives from Farmshare Austin and Sustainable Food Center for edits, and the final version was approved by the IRB in July 2018. A copy of this interview guide can be provided upon request.

Interview Recruitment

Initially, a list of organizations was provided to the UTSPH Evaluation Team in May of 2018. When members of the UTSPH Evaluation Team staff reached out to organizations in July through September 2018 they had very limited success, due to the market schedules and high demands on the organizations.

In order to increase participation, in late fall of 2018, the original list of organizations was shared with other collaborators at the City of Austin, who then helped crowd-source a list of over 75 organizations and entities that worked on various programs to better improve food access through a variety of different strategies. In January and February of 2019, UTSPH Evaluation Team members went through the list of organizations and selected only organizations and entities that utilized a mobile market strategy. This meant that the program operated more than one market that was not a brick and mortar location that sold produce (and potentially staple goods or other food items). From the list of over 75 organizations, there were 23 organizations that met these requirements per their website, social media, and other promotional/informational materials.
METHODS

Interview Recruitment Cont.

In late February/early March 2019, all 23 organizations and entities were contacted via email about participating in an informational interview about their mobile market program. If after three emails from the UTSPH Evaluation Team no representative responded, the organization or entity was removed from the contact list. Of the original 23 organizations/entities that were contacted, 19 were interviewed, and four were contacted multiple times and the UTSPH Evaluation Team were unable to schedule an interview.

In late March 2019, an additional eight organizations were contacted to be interviewed. In this additional stage of recruitment, organizations outside of the Northeast were targeted since the majority of responsive organizations initially contacted were from the Northeast, and we wanted to have a more nationally representative sample of organizations. Of those eight additional organizations that were contacted, six of them completed interviews.

Data Collection

In March and early April 2019, trained UTSPH Evaluation Team members conducted the interviews utilizing the questions on the IRB approved interview guide. All interviews were conducted over the phone and were recorded, with consent from the individual. In all, 25 interviews with organizations/entities were completed, 19 from the initial round of data collection, and 6 from the additional recruitment wave.

Data Analysis

Each interview was listened to independently by two members of the UTSPH Evaluation Team staff. Each UTSPH Evaluation Team member was assigned to listen to 12 or 13 interviews and completed a synthesized worksheet asking about demographics, organizational structure/operations, marketing, product selection, community involvement/participation, evaluation, and any additional comments for each interview that they listened were assigned. Additionally, each member identified common themes across their 12 to 13 interviews. After these were completed, the UTSPH Evaluation Team discussed their findings as a group and decided on overarching themes across all interviews. These findings are summarized and presented in the Results section (pg 4-8).
RESULTS

Demographics of Groups Interviewed

The characteristics of the groups interviewed are presented in Table 1. The majority of organizations interviewed were located in the Northeast US, with organizations based in Maine, Connecticut, Massachusetts, Rhode Island, New York and Pennsylvania. Many of the more established mobile market programs interviewed were from the Northeast and were referenced as being helpful to getting newer mobile market programs up and running in the region.

The majority of mobile markets served either a mix of urban, suburban, and rural areas (33.33%), or exclusively urban areas (29.17%). These findings were expected, since the majority of programs surveyed mentioned that they were located near a large metropolitan area. However, 20.83% of mobile market programs interviewed stated that they served an exclusively rural area. These groups were more likely to report long drives (over an hour) to get to the nearest full-service grocery store and emphasized the need for easier access to specifically fresh produce and staple goods in their communities.

Of the mobile market groups interviewed, over 70% reported being seasonal, with most markets operating in the summer to early fall months. The common reasons for operating seasonally were due to growing seasons of their climate, and organizational capacity. Organizations ran their mobile market strategy for an average of 4.7 years (range 1-10 years) and had an average of 9 stops per week (range 1-28 weekly stops).

Table 1: Demographics of Mobile Market Programs Interviewed

<table>
<thead>
<tr>
<th>Region</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>9</td>
<td>36.00%</td>
</tr>
<tr>
<td>South</td>
<td>5</td>
<td>20.00%</td>
</tr>
<tr>
<td>Midwest</td>
<td>3</td>
<td>12.00%</td>
</tr>
<tr>
<td>Mountain West</td>
<td>3</td>
<td>12.00%</td>
</tr>
<tr>
<td>Southwest</td>
<td>3</td>
<td>12.00%</td>
</tr>
<tr>
<td>West Coast</td>
<td>2</td>
<td>8.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>7</td>
<td>29.17%</td>
</tr>
<tr>
<td>Suburban</td>
<td>4</td>
<td>16.67%</td>
</tr>
<tr>
<td>Rural</td>
<td>5</td>
<td>20.83%</td>
</tr>
<tr>
<td>Mixed</td>
<td>8</td>
<td>33.33%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Seasonality of Market</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year-Round</td>
<td>7</td>
<td>29.17%</td>
</tr>
<tr>
<td>Seasonal</td>
<td>17</td>
<td>70.83%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years of Operation</th>
<th>Range = 1-10 years</th>
<th>Mean = 4.7 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Stops</td>
<td>Range = 1-28 weekly stops</td>
<td>Mean = 9 weekly stops</td>
</tr>
</tbody>
</table>
Major Themes

Operations
Organizational Structure and Site Placement

There were a variety of consistent themes pertaining to operations and organizational structure throughout the interviews. One major theme was that programs tended to be a component of a larger organization. This larger organizational structure helped the initiative since many of them were not financially sustainable on their own.

The types of stops were also consistent across the interviews. Common stops were schools, low-income housing communities, and senior housing centers. Senior housing centers were often listed as the most successful stops because there are people who are always there, have an appreciation and understanding of the importance of fresh (and often local) produce, and have strong cooking skills. Also, it was repeatedly emphasized that successful markets were often those that had the strongest relationship between the site and the mobile market organization.

Food Assistance and Incentives

Another common trend was that the majority of programs accepted food assistance and offered incentives for customers who were on food assistance programs. Over 75% of the programs interviewed reported that they accepted SNAP, and offered discounts to individuals who were on SNAP, WIC, TANF, and other food assistance programs. Additionally, the majority of markets offered or accepted financial incentives for customers using SNAP and expanded to WIC, and clientele that were on food assistance programs. Those that did not accept SNAP or other food assistance were typically younger initiatives and/or did not have the support of a larger organization.
RESULTS

Major Themes

Operations

The majority of the programs were supported through grant funding, with many organizations discussing the importance of Food Insecurity Nutrition Incentive (FINI) grants for supporting their work. FINI grants, funded through the US Department of Agriculture (USDA), are awarded to programs who aim to increase the purchase of fruits and vegetables among low-income consumers participating in SNAP by providing incentives at the point of purchase. Some organizations reported that their FINI grant had a stipulation that the fruits and vegetables being incentivized had to be local or state-grown produce.

Additionally, some groups discussed that in order to make their markets more financially sustainable, they employed a “mixed model” strategy, where they had strategically placed markets in communities of need, and then also had markets located at workplaces or for private entities and often sold products there at a higher price point. Nearly 90% (88%) of the programs interviewed discussed the difficulties of achieving financial sustainability with a program that compensates farmers for their produce at a fair rate, while also offering economically accessible produce (and staple goods) to disadvantaged communities.

Funding

Marketing

Nearly all of the mobile market programs interviewed discussed similar strategies for marketing. Specifically, word of mouth, flyers, and social media targeting new/repeat customers were the most commonly stated strategies for marketing. Also, the majority of programs interviewed also utilized partners’ or sponsors’ networks and cross-marketed the mobile markets if partnerships and/or sponsorships were part of the program. Also, no organization reported hiring an outside marketing/advertising group or firm.
Major Themes

Product Selection

Product selection was typically dependent on the climate of the area. However, nearly all offered a combination of fresh fruits and vegetables, and over half also offered staple goods. A common theme in the interviews was the often-competing priorities of offering local produce and culturally-relevant/community-desired produce. Specifically, many mentioned that there was a tension between providing local produce and produce that was desired by the community but could not be produced locally (bananas were a commonly requested item that could not be grown locally). Some markets were beneficiaries of FINI grants offering Double Dollar/Double Up Food Buck type of SNAP incentive programs, but these incentives only applied to local/state-grown produce, which some groups found to be limiting. Additionally, many year-round markets were often supplemented with other produce in order to have products available outside of the growing season.

Another key theme for promoting specific produce was to offer complimentary programming to increase education. Specifically, having recipe sampling, cooking demonstrations, or written recipes in a variety of languages were commonly reported strategies used to promote specific ingredients or increase knowledge.

Community Feedback and Involvement

All programs interviewed reported that their participants sincerely appreciate and value the mobile market program brings to their community. Nearly all programs interviewed expressed that they take community feedback on product selection, price, and site location into consideration. Specifically, many groups that served racially/ethnically diverse communities discussed the importance of community feedback in order to provide culturally relevant produce that would be able to grow in their climate, such as offering callaloo in neighborhoods with large Caribbean populations. Organizations felt as though if there were more culturally relevant products being offered, there was often greater community involvement and participation in the market.
RESULTS

Major Themes

Community Feedback and Involvement Cont.

Additionally, nearly all programs interviewed discussed the importance of community ownership for a market’s success. For instance, the majority of groups discussed that markets that were the most successful had the greatest community participation and typically had at least one member of the community that would help promote the market to their friends and neighbors. Conversely, often the least successful markets reportedly had the lowest community involvement and participation.

Evaluation

The majority of groups interviewed did not have a formal evaluation component, the ones that did were often affiliated with a university or larger research entity. The few organizations that did implement an impact evaluation reported that their customers reported eating more fruits and vegetables due to shopping at their mobile markets. Also, these organizations reported the benefits of having an evaluation program and that they incorporated their evaluation findings to inform their product selection, site selection, and other components of their programs. Many organizations that did not have a formal evaluation component also stated that they feared a comprehensive impact evaluation would place too much burden on the shopper.

When asked about success, all organizations stated that they measured success by the number of customers served per market (transactions), and/or the sales per market in dollars. Additionally, many groups recorded the number of SNAP sales or dollars of incentive redeemed as an indicator as to whether they were reaching their desired population. Growth in terms of increasing the number of market sites from year to year was seen as an indicator of success for newer programs, while more established programs typically discussed their maintained high participation rates as a successful outcome.
In conclusion, mobile market strategies are being implemented across the country in a diversity of settings and geographies to improve healthy food access, many of the implementing organizations are experiencing the same opportunities for growth and the same barriers.

Common structural elements were that they were typically a component of a larger organizations, groups implementing mobile market strategies are deeply committed to improving their local food system and improving access to healthy food. Also, it was common for mobile markets to accept SNAP and other food assistance programs, as well as to offer incentives for SNAP and expand incentives to other food assistance programs. However, many mobile market programs struggle with maintaining financial sustainability.

Strong relationships with market sites and the surrounding community were stated as being integral for the success and continuation of markets. Most groups relied on word of mouth and existing community networks to promote the mobile market programs. Communities were reported to be very satisfied with the services and produce being offered at the mobile markets, and were especially appreciative and responsive to culturally relevant produce offerings. Yet, community engagement and involvement varied by site and were commonly identified as barriers to getting specific markets up and running.

Few organizations utilized formal evaluation practices, but did monitor and measure success by number of customers, amount in sales, and if their desired populations were being reached/served (commonly measured in SNAP dollars spent/incentives received. Developing networks for collaboration for mobile market organizations to share resources and evaluation tools could help with dissemination of findings and quicker implementation of research into practice.

**For additional questions, please contact Kathryn Janda at Kathryn.M.Janda@uth.tmc.edu**