FINAL REPORT

Community Food Project Planning Grant 2010:

"Community Action Food Project: Growing New Mexico's Food System by Empowering Low-Income Eaters"



Prepared by: New Mexico Farmers' Marketing Association December 2010

TABLE OF CONTENTS

I.	Executive Summary	p. 3
II.	Background	p. 7
III.	Research Plan	p. 7
IV.	Research Implementation	p. 10
V.	Research Findings	p. 11
VI.	Needs Identified & Community-proposed Solutions	p. 18
VII.	Summary	p. 23
VIII.	Appendix	p. 24

Community Action Food Project: Growing New Mexico's Food System by Empowering Low-Income Eaters

Prepared by the New Mexico Farmers' Marketing Association, December 2010

I. EXECUTIVE SUMMARY

The New Mexico Farmers' Marketing Association (NMFMA) works to increase the direct marketing opportunities for small-scale farmers across the state through public education, technical assistance, and advocacy.

This project, "Growing New Mexico's Food System by Empowering Low-Income Eaters," was funded through a one-year USDA Community Food Project planning grant.

Project Overview: The goal of the project was to gain knowledge about how to best address the disparities and food access needs of low-to-moderate income residents in both an urban and rural setting in New Mexico. Furthermore, an intended project outcome was that through the efforts of the qualitative research gathered through the community action research methodology, a value chain approach for creating a pilot would emerge. The goal of the pilot would be to get more locally grown food to low and moderate-income individuals and families in at least one of the two targeted communities. Additional intended outcomes included the dissemination of project "learnings" and ultimately the replication of the pilot model.

The two communities to be studied were urban Santa Fe and rural Rio Arriba Counties.

Timeframe: The project was given the green light in October 2009. November 2009 saw the development and initial training of the Advisory Team, and by January 2010 the research team of five individuals from two counties was hired. Researchers were trained in qualitative research methodologies and developed a research plan in winter 2010. Personal interviews and focus groups took place between May and late September. An extension was requested to accommodate a change in focus groups that included market tours and incentives to increase participation. All interviews were transcribed and coded for analysis. Project results were disseminated in December and beyond. A pilot is slated for the 2011 growing season.

Targeted subjects: Individuals from the following subject position groups were targeted as the research subjects: seniors living in low-income housing, Hispanos, immigrants, families and individuals receiving benefits (WIC, Senior, SNAP), Native Americans, and others living in both urban and rural settings. One-on-one interviews were conducted with 71 individuals of various backgrounds, and 58 individuals participated in focus groups and market tours.

Findings: Some findings transgressed subject position such as gender, race and age, and some crossed the rural/urban divide. Details are explored in the body of this Report. In general:

• Rural and urban alike had negative perceptions about the price associated with "healthy" (fresh) food. The research showed the majority of those interviewed often make buying decisions primarily based around price.

• Among people who were most concerned about price, satisfaction with currently purchased grocery store food was generally low. Those less concerned with price were more satisfied with the quality of their food purchases.

• Rural residents seemed to have a greater awareness and understanding of the value of local food. Access (including driving distances during winter and spring) and convenience proved to be the greatest barriers for rural residents, with price a somewhat lower barrier.

• Many rural participants, in particular, expressed concern about diet-related illnesses such as diabetes and heart disease, and many had an awareness of the connection between what they eat and how they feel.

• Many rural people voiced a connection to agriculture because they were raised growing, preparing, and storing foods that came from their own community.

• Urban residents were more likely to be concerned about the price of locally produced food, as well as the lack of convenience of purchasing local food.

• Urban seniors who were motivated by their health in their food choices felt they couldn't afford the foods that they know are better, such as those found at the Santa Fe Farmers' Market or natural food stores.

• Health of their children was important to urban and rural families alike, but price often deters healthy choices. Parents noted the need for kids to feel good about the appearance of food and to assist in its preparation.

• Among people with benefits, satisfaction with SNAP (formerly food stamps) was higher than the regular WIC program (<u>not</u> the Farmers' Market WIC Program) because they felt SNAP gave them more choice of what they could buy (organic, if they wanted) compared to the pre-determined WIC food categories.

• When it comes to shopping at farmers' markets, common barriers followed subject position demographics such as age and family structure, though all groups had difficulty with price in Santa Fe. Working people and families are unable to get to the Monday market in Española or the Tuesday (and sometimes Saturday) market in Santa Fe due to work and family schedules. Seniors, on the other hand, primarily had difficulty with transportation (including parking) in Santa Fe.

Needs Identified and Community Proposed Solutions: Barriers to accessing healthy, fresh foods generally fell along lines of age and whether people live in a rural or urban area. The main obstacles to purchasing good food—locally grown when available— center around a lack of convenient and affordable shopping in urban areas; transportation

and price for seniors; and a lack of local food outlets for rural people. The researchers discovered great opportunity to improve education/awareness about farmers' markets, foods grown locally, and benefit programs that can be used at farmers' markets. The community researchers and staff developed the following targeted needs and suggested next steps for addressing these issues: (A more complete description follows in the body of the report.)

1. Target Need: Education

Suggested actions:

- Create recipe cards for farmers to distribute with less familiar crops
- Create public education campaign to motivate healthy, fresh, family eating
- Create new education opportunities at WIC clinics, Head Start schools, and other family gathering places
- Create a Spanish language farmers' market outreach plan to educate immigrant populations about local food access points
- Create a "How to Educate Your Customers" guide for farmers to inspire them to price and label market food with educational information
- Create a "demo booth" at markets where foods can be tasted and recipes distributed
- Tap into state library network to distribute information about market events and nutrition education information
- Utilize the network of northern New Mexico health care workers to educate new mothers about fresh, local produce; create market tours for the health care workers to introduce them to the produce and the growers, and provide them with educational material (like NMFMA's Local Food Guide) to distribute to the mothers

Resources Needed:

- Financial resources are needed for: creation and production of recipe cards, public education campaign and "demo booth" pilot; also need funds to develop the healthcare network and to produce the Locally Grown Food Guide
- Library network can be tapped when there is program information to share (initial contact has been made)

2. Target Need: <u>Convenient and Affordable Shopping for Families</u> **Suggested Next Steps:**

• Utilize Head Start as an access point for a pilot to bring food to low-income families; parent volunteers will coordinate food delivery purchased "wholesale" from the market location and deliver to Head Start for same day pick up (further details in report)

Resources Needed:

• The NMFMA plans to try a mini-pilot in the 2011 growing season in Santa Fe, but there will be no funds to help pay for the key parent coordinator or fully develop program with adjunct education pieces such as recipes cards, cooking demonstrations, etc.; Head Start partners are in place in Santa Fe, Española, and Albuquerque; grant funding will allow full pilot exploration in all locations

3. Target Need: Discounts and Transportation for Seniors

Suggested Next Steps:

• Develop a "senior discount program" at the Santa Fe Farmers' Market; vendors who choose to participate in this voluntary program can post signage and will be promoted in outreach

• Help senior centers and low-income senior housing groups to coordinate cityprovided transportation; encourage "change agent" mentors from one senior center to "train" other senior coordinators

Resources Needed:

Minimal financial resources are needed to cover the NMFMA's staff time coordinating the program with farmers; the groundwork has already been laid with a number of producers; small amount of funding is needed to produce outreach materials

4. Target Need: <u>Local Food Outlets in Rural Areas and Food Preservation</u> **Suggested Next Steps:**

• Encourage home-garden co-ops, a cooperative of families who can coordinate and trade foods grown at home

- Encourage food preservation methods such as drying, freezing, and canning
- Encourage support of current farmers' markets

• Encourage development of "food hubs" in rural areas, including cold storage and food preservation equipment for area farmers for future redistribution of food

• Encourage "corner store" purchase of fresh food

Resources Needed:

• Other interested parties to help encourage home-garden co-ops

• Financial resources to develop the 2011 Locally Grown Food Guide that will include information about preserving, drying, and freezing foods gathered from the community

• Financial support and lead "agency" to develop cold storage and dehydration equipment in Rio Arriba County (or tap into existing infrastructure)

Summary

The work of the five community researchers who asked food and health-related questions in their own communities is an important step to understanding more about this segment of buyers in the food value chain of Northern New Mexico. By making an effort to gain an accurate understanding of the needs, desires and barriers that this group of low and moderate income people face when considering food choices, farmers and community stakeholders can continue to address the issues that were brought forward.

With the consumer-based research complete, and many ideas for next steps and needed resources identified, the NMFMA will continue to reach out to community partners to disseminate project findings, seek feedback, and formulate plans for the coming years. The NMFMA will continue to search for financial resources to capitalize on the human resources and important value chain information that was uncovered during this project.

II. BACKGROUND

The New Mexico Farmers' Marketing Association (NMFMA) works to increase the direct marketing opportunities for small-scale farmers across the state through public education, technical assistance, and advocacy.

In a state where 19.3% of the population lives below the poverty level and, according to the state department of public education, nearly 204,000 low-income students — about three-fifths of public school students — received free or reduced-price lunches in 2009, the NMFMA understands the importance of creating market opportunities for farmers to reach this segment of the population. But increasing local farmers' share of the food dollar is only half the story: It is also imperative that low and moderate income populations have access to healthy, locally grown food for the nutritional well-being of our state's residents.

With the goal of finding new ways to empower New Mexico's low-income residents to gain access to more locally grown food, the NMFMA embarked on a one-year qualitative research project funded by USDA's Community Food Project Planning Grant.

The two communities that were chosen for the research were Santa Fe and Rio Arriba Counties. These regions were chosen for a number of reasons including: both communities have significant populations of low and moderate income residents; both communities have strong farmers' markets; Santa Fe represents an urban community while Rio Arriba is largely rural; Santa Fe Farmers' Market has food pricing often out of reach for lower income residents; Española Farmers' Market has lower food prices but faces other barriers; and finally, proximity to the NMFMA office for coordinating the project. (See Sec. 1 of the Appendix for income statistics and other related notes about the two regions.)

In order to determine how to best address the disparities and food access needs in these two communities, the NMFMA project, called "Growing New Mexico's Food System by Empowering Low-Income Eaters," was designed to be a community-action research project. The goal was to collect qualitative data to develop a value chain approach for creating a working pilot to get more foods from local producers to low and moderate-income families and individuals from all backgrounds in both targeted communities.

III. RESEARCH PLAN

Key stakeholders were identified early on to take part in the conceptual planning of the project. Stakeholders included representatives from the Senior Services Division of both Santa Fe and Española; the University of New Mexico (UNM) Prevention Center, a research institution that seeks to improve community health; the New Mexico Department of Agriculture; the Food Depot, which provides emergency food relief and other services to northern New Mexico; the Santa Fe and Española farmers' markets; Farm to Table, a non-profit that promotes locally based agriculture; La Montañita Food Co-op; and the Santa Fe Women Infant Children (WIC) office. These representatives

took on the role of advisory Committee for the project. NMFMA staff also brought on a research consultant, Dr. Claudia Isaac of the UNM Planning Department.

With the guidance of Dr. Isaac, NMFMA staff and the advisory committee developed the conceptual framework for the project. The project goal was to empower low-income communities in Santa Fe and Rio Arriba Counties to engage in the planning and design of enterprises that help bring more local, affordable food to their tables. The conceptual framework was developed like a tree, with the issues or problems needing to be addressed as the "roots," the research objectives as the "trunk," and the strategic research directions being the "branches" of the conceptual "tree."

The roots of the project were already clear to the advisory committee, as they all work as advocates for various sectors of the targeted populations and are very aware of their nutritional needs and obstacles. Despite northern New Mexico's rich agricultural history of family farming, there are many low-income rural and urban communities within New Mexico that are struggling to meet their basic subsistence needs. Though there are nutritious, locally produced foods available, the real costs of production result in high-quality foods that are economically out of reach for many New Mexicans. Additionally, lack of awareness of this healthy food supply keeps many residents from enjoying locally grown food options. In an effort to get food on the table, many families in New Mexico instead rely on non-local, highly processed foods with little nutritional value. These were the *a priori expectations* for what the research would uncover.

The research objective, or the trunk, of the conceptual tree was two-fold. First, the advisory committee determined that the research needed to assess the barriers that keep low-income New Mexicans, including the elderly, Hispano/Latinos, and others from purchasing locally grown foods. Second, the research should attempt to harness the problem-solving capacity of these communities to develop a "value chain plan" that could overcome these identified barriers.

The advisory committee determined seven strategic research directions for the project (the branches of the tree) to be the most important avenues for meeting the research objective, and thus getting to the roots of the problem. The branches included government subsistence programs such as WIC and SNAP at farmers' markets, community building around food, local food-based economic development, consumer marketing and education, low to moderate income people's perceptions of farmers' markets, and access to affordable food. The advisory committee also wanted to ensure that whatever strategy came out of the research could be replicated in other parts of the state.

It was clear at this point that the community researchers hired to carry out the research would be critical to the project's success. It was essential that the researchers be members of the communities that they would be working within. Therefore, the advisory committee and NMFMA staff determined that two researchers would be hired from Rio Arriba County and two from Santa Fe. Beyond geography, the desired research team would be made up of one low-income senior, one immigrant, and at least one bilingual Hispanic or Latino person from the area. The NMFMA sought out the researchers through recommendations from advisory committee members, an article in the Santa Fe *Senior Scene* newsletter, fliers at various agencies that serve low and moderate income people, and word-of-mouth through the advisory committee network.

After reviewing letters of interest and conducting interviews with many candidates, the research team was assembled by January of 2010. In Rio Arriba County, the first researcher hired was a young bilingual woman who is very passionate about local foods and is active in the local food community. The other half of the Rio Arriba team was a husband and wife team from Abiquiu who are deeply embedded in their community. The husband is a rancher, and the wife is the librarian of their small community's library. The researcher who would be working with the senior population was hired in Santa Fe. The senior researcher lives in a local low-income senior housing facility and frequents several of the senior centers in Santa Fe. With the help of a contact with the local Head Start program, the NMFMA was also able to hire an immigrant of Guatemala who is a mother of two young children and is active in the Head Start community.

In the winter of 2010, the research team met four times in Santa Fe for trainings, research plan development, and a practice interview session. The first training with Dr. Isaac dealt with an introduction to qualitative research, the conceptual tree that the advisory committee had previously developed, research design, sampling, ethics, and data collection. In addition, a representative of Farm to Table provided an overview of value chain analysis. By the end of this first training, the research team began to develop their central question that would guide the research. This question was developed both to help maintain the focus of the study and to explain the purpose of the research to the participants. Dr. Isaac explained that this central question is fluid—it can and should evolve as the research progresses.

At the second training with Dr. Isaac, the research team firmed up the central research question: <u>"What can you help us learn about the opportunities and barriers around obtaining local, fresh, affordable foods in Santa Fe and Rio Arriba Counties?</u>" In this session, Dr. Isaac led a thorough training on various qualitative research methodologies, including observation, individual interviews, surveys, and group interviews (a.k.a. focus groups). The final portion of the training dealt with the analysis techniques of coding, triangulation, and social mapping.

After completing the trainings with Dr. Isaac, the research team met again to develop the research plan. This meant determining what methodologies would be used, developing questions for interviews, determining the ideal mix of subject positions that would be surveyed, and brainstorming ideas for subject recruitment. The researchers determined that as a team they would try to complete 80 individual interviews and four focus groups. The team worked to develop a set of target numbers for various subject position based on gender, race or ethnicity, age, household size, and community population size. The team also made a plan to speak to a target number of immigrants, food producers, and people who receive government benefits such as SNAP and WIC. Lastly, the team created a list of 35 interview questions that dealt with food shopping habits, cooking, and local food. These initial questions would serve as a jumping off point for the researchers as they became more comfortable with the research process.

The final winter meeting offered the research team an opportunity to put their new research skills into practice before going out in the "real world" of qualitative research. Team members conducted practice interviews with each other in order to gain confidence with the interview process and the subject matter.

IV. RESEARCH IMPLEMENTATION

As determined from the research plan, the primary data collection method employed was personal interviews. Researchers used a variety of methods to recruit subjects such as posting fliers, scheduling formal face-to-face interviews, and interviewing people on the spot at venues such as senior centers, WIC clinics, farmers' markets, libraries, and other community centers. In addition to the 71 individual interviews conducted, the research team also conducted six focus groups with 58 individuals.

The sampling of subject positions of those who were interviewed was fairly close to the desired mix that was determined as part of the research plan. Because women tend to do most of the shopping and cooking for their households, the research team determined that they would like to speak to more women than men. Of the 71 participants who were interviewed individually, 73% were female, and 27% were male. Along age groups, 35% of those interviewed were ages 20-40, 26% were 40-60, and 39% were 60 and older. For community population size, 57% of the subjects interviewed lived in the urban city of Santa Fe, while 43% lived in rural areas of Rio Arriba County. And finally, 63% of the individuals interviewed were Hispanic or Latino, 20% were Anglo, 12% were Native American, and the remaining 5% of subjects were Asian and African American.

Interviews dealt with a variety of topics around shopping, cooking, and eating habits. To determine how people are currently accessing foods, researchers asked participants to discuss topics such as where they currently buy most of their food and why, how often they shop, how they choose the fruits and vegetables they buy, price, satisfaction, and convenience foods. Interview subjects were also asked about how often they cook, fruit and vegetable consumption, and influences on their cooking and eating habits. Local food discussions dealt with perceptions of local food and farmers' markets, interest in local food, benefit programs, and other ways of accessing local foods.

After the individual interviews were completed, the research team decided to hold several focus groups where they could discuss issues that had arisen from the interviews and talk about solutions. The first focus group was held in Rio Arriba County at the Española Public Library. Despite tremendous efforts on the researchers' behalves as well as confirmation from 10 attendees, attendance at this first focus group was very low. The research team determined that in order to get more participation, an incentive would be necessary. The following focus group in Santa Fe took place at a low-income senior housing facility and participants were offered a small sum of "market bucks" that could be spent at the local farmers' market. The incentive proved to be successful, as 18 seniors from the residence came to participate in the focus group for a lively discussion.

As the research phase began to wind down, the research team concluded that education was a significant missing piece of the puzzle when it came to local food. For the final four focus groups, the team decided to hold farmers' market tours at the Santa Fe and Española farmers' markets. Tours were limited to 10 people and were targeted to low and moderate-income people who had either never been to a farmers' market or who were at least not regular market shoppers. Each tour began with a series of discussion questions about their preconceived ideas about the farmers' market and local food as well as their general shopping and cooking habits. Each participant was then given market bucks to spend while they toured the market and spoke with the farmers. After the tour, participants were brought back together to discuss if and how their ideas about the market and local foods had changed. All together, 58 individuals participated in the focus groups and market tours.

Once completed, all interviews and focus groups were transcribed and coded using the research software, *Atlas.ti*. The research team developed a code book—a list of important topics such as "farmers' market perceptions" or "influence of culture on food choice" by which data could be grouped into reports organized by code. Once the reports were disseminated, members of the research team analyzed the reports individually, looking for trends and the general story of the research, before meeting as a team to discuss their findings and ideas for formulating the pilot project.

V. RESEARCH FINDINGS

Through a process of triangulation—looking for the points of convergence and divergence from the stories of different groups of people—the research team was able to identify several trends within the data. The most noticeable differences were between the urban and rural participants. Age was also a big influence on food access issues, as seniors face many different kinds of challenges than younger people. Other factors such as gender and ethnicity seemed to play a much smaller role in determining people's barriers to accessing nutritious foods. The topics that seemed to be most important and where trends could be identified were: local food perceptions, health, feeding children, education, price, and farmers' market perceptions.

FINGINGS—LOCAL FOOD PERCEPTIONS

In general, those people living rurally in Rio Arriba County seemed to have a greater awareness and understanding of the overall value of local food than those who live in the more urban population of Santa Fe. The majority of rural participants interviewed said that they prefer to buy local food over conventional for reasons of superior taste, quality, nutritional value, or the economic benefit to the local community. While most urban subjects had a general impression that local food was probably better than the conventional foods they get at grocery stores, they were not necessarily willing to pay a higher price for it or put in extra effort to find it. Urban shoppers are primarily concerned with price and convenience. Many others expressed that it is more important that their food be certified organic than locally grown.

"I would pay a little bit more [for local food] because I would know that it's fresh and it's helping out. If it had to be that way, I would pay more because I look at it as fresh, healthy, and it doesn't have any additives or preservatives... Nowadays you have TVs that you have to pay for the channels. How come you can't spend a little bit more for good food that will keep you healthy for a little bit longer?" – rural Hispanic male

"It is important to me and my family [where my food is grown], but I don't have time to shop around... I shop for locally grown food if I can find it easily, but if I can't find it, or it doesn't say it there clearly, I don't go looking for it." – urban Hispanic female

FINDINGS—HEALTH

Whether urban or rural, young or old, eating healthy means spending money to many New Mexicans. The vast majority of those interviewed think more about price than whether or not their food is a healthy choice.

"You know, [healthy food] is expensive stuff. I know that for us, there are some things that are healthy that are cheap, but I always find that it's expensive. You can't buy stuff like that, so you buy junk foods for a lot cheaper than some of the better quality foods..." – rural Hispanic female

This does not mean, however, that New Mexicans are not worried or motivated by their health. Many rural participants expressed great concern about diet-related illnesses such as diabetes and heart disease. Additionally, many rural participants had a strong sense of awareness of the connection between what they eat and how they feel. Several rural participants said that they were forced to drive great distances to Santa Fe in order to access high quality, nutritious foods, especially during the winter and spring, when the farmers' market is not available. When it's not feasible to drive those distances, some rural people feel that they are forced to eat less healthy foods.

"I live in Española and all we have is Lowe's, and their produce is really sad. And there's Walmart, again very sad. There are a few little markets and stuff, but they seem pretty so-so... I see the correlation between what I eat and how I feel, so it's important to me. I'm willing to drive extra. Shoot, from my house it's 60 miles round-trip, so that shows you because I could go two blocks down the street to Walmart." – rural Hispanic male

"Living rurally in northern New Mexico, in Velarde, my habits are... I feel less healthy than what I've been before when I lived in California, where the growing season is longer and there are farmers' markets year-round. We don't have that convenience here because of weather patterns, so it's harder to eat produce, good produce, year-round. And then having trouble accessing good produce from a health food store, the non-conventional organic stuff, you have to go to Santa Fe. *I just grab stuff there when I'm in Santa Fe, but I don't make special trips for produce, so I end up stocking up on a lot of vinegars and oils and nuts and those kinds of things that will keep."* – rural Hispanic female

The urban seniors interviewed were highly motivated by their health in their food choices, but many felt that they couldn't afford the foods that they know are better. Younger urban parents are motivated to feed their kids healthy foods, but they don't necessarily know which foods are most healthy or healthy ways of preparing them. Additionally, in rural areas especially, language and cultural barriers can inhibit people from trying healthy foods that they may not be familiar with.

"It was my hope that the women with the WIC checks and EBT cards would be adventurous and try kale and things like that. Mostly they didn't know what to do with it. A lot of them didn't speak English, so they felt like they couldn't ask many questions... A lot them would just go with what they knew and get in and get out." – rural market farmer

FINDINGS—FEEDING CHILDREN

In both rural and urban areas, many participants with families felt that they had to make compromises with their children's nutrition because of price. For many participants, price is the most important factor when it comes to buying food. Price supercedes factors such as taste, appearance, certified organic, or where the food is grown.

"I'm very worried about the way my kids are eating because they're obese, but at the same time you can only prepare certain things that you can afford... What we can try to make healthier we do, but I still wish we could work to do better because they are very obese and I worry about diabetes and stuff."

- rural Native American female

Aside from issues around price, many urban parents expressed concern about the appearance of their fruits and vegetables because they worried that their kids would not eat produce that doesn't look perfect. Because conventional produce from the grocery store is uniform in shape and size, blemish-free, and shiny, that is the image that kids have become accustomed to.

"Food appearance is very important, more so than taste, because if it doesn't look good my kids won't eat it." – urban Hispanic female

From speaking with nutrition educators and parents, it became evident that kids seem to be more open to trying new healthy foods if they can be involved in the preparation of the foods. Additionally, kids that are not exposed to fruits, vegetables, and other healthy foods at a young age are less willing to try them as they get older.

"For me, having my daughter be a part of making the meal is what has her wanting to cook and eat better... With the kids that I work with in the cooking classes, I think a lot of them, if they won't eat healthy foods in the class, they're not getting them at home... One of the last recipes we did was grilled vegetable sandwiches with mushrooms, eggplant, asparagus, red onion, squash, and tomatoes. The majority of the kids ate really well, but some of them that didn't were overweight and said they never eat like that at home or they were 'allergic.'" – rural Hispanic female and nutrition educator

FINDINGS—EDUCATION

In addition to being more aware of the value attached to locally produced foods, rural people also seemed to have a much better knowledge base about what foods are grown in northern New Mexico than their urban counterparts. When younger and middle-aged urban participants were asked about their favorite local foods or what local foods they would like to see more of, many said that they either didn't know anything about them, or spoke about foods such as bananas, papayas, and oranges—all foods that are not grown in New Mexico's high desert climate.

"I would hope that foods that are locally grown might be healthier or fresher, but I really don't know much about what grows here. I don't think about where my food is grown, so it's not really important to me. It should be?"

– urban Anglo female

By contrast, many rural people interviewed share a deep connection to agriculture because they were raised growing, preparing, and storing foods that came from their own community. As rural lifestyles have moved away from farming and towards distant commutes and long working hours in the cities, many rural parents and elders expressed concern that the younger generations now growing up in rural northern New Mexico will not be instilled with the same knowledge.

"If we want people to be healthier and if we want people to support local farmers, then we also need to have some sort of way to have food preparation teaching... I think we don't teach in society, we don't teach in schools, we don't teach in churches... Even for parents, very few parents will pass down how to cook or take the time to cook because they're so busy and working. It's really a process. People really don't know how to do it anymore. It has to be taught to our young people so that they can grow into it. Make it feel comfortable and normal and familiar and soothing, all those things." – rural Native American female

In addition to knowledge about local and healthy foods, there were also differences found among groups in terms of cooking skills. Interviews and focus groups indicated that immigrant populations are very accustomed to cooking with fresh ingredients and have a wealth of knowledge and skill when it comes to cooking nutritious meals with fresh fruits and vegetables. Immigrants at focus groups said that they would be extremely interested in accessing local fruits and vegetables, but they were not aware of the farmers' market, and barriers around the market's schedule, price, and language also kept them from attending. Seniors that attended focus groups also shared that they know how to cook with fresh ingredients, but often didn't feel motivated to go to the effort because they were only cooking for one person. Many single senior men in particular, eat a lot of premade foods at home.

"I don't cook very much. I go to Trader Joe's because they have a lot of entrees already prepared and they're well-balanced meals." - urban senior male

FINDINGS—PRICE

Food price is clearly a major factor in deciding which foods to purchase for most low and moderate-income northern New Mexicans. When it comes to local food, however, perceptions about price have a lot to do with where you live. For the rural people interviewed, most felt that prices were a little higher, but the quality is so different that it's like comparing apples to oranges.

"I think local food is magic! I just love it. It's so good. It's all different sizes and diverse and it reminds me of a reflection of the people. I like that everything doesn't all look the same and isn't genetically modified and all the same size. I think it tastes better and is probably more nutritious and it's better for the environment because it didn't have to travel far. I like to feel like I'm supporting a local business, too. I'd rather give my money to these people, even if I have to pay a little bit more. It's worth it." —rural Native American Female

In Santa Fe, on the other hand, the first thoughts about local food that come to mind tend to be about the higher prices. This sentiment transcends all other demographics among urban people.

"Aside from green chile, I don't buy or look for any local foods because they're so expensive. I would like to see more beef grown here in New Mexico, but I do not want to see a package so small and so expensive just because it grew up here." – urban Hispanic male

"I don't know about other people, but I'm living on a very limited income. I came here [to the farmers' market] on Saturday, and what I know is I can buy peaches at Sunflower market for 88 cents a pound. They were \$3 a pound here. I'd love to eat the peaches here because I know they're more healthy. I know they were recently picked ripe. I buy green at the store, so they're not fully developed and I'm not getting all the nutritional value out of it, but I have no choice. I would love to eat exclusively from here, but I can't." – urban Hispanic male

Perceptions about price also seem to have a great impact on people's perceptions about the quality of the food they buy. For those who were primarily concerned about price, satisfaction with food quality currently purchased at grocery stores was generally low. Conversely, those who didn't consider price as big of a factor were very satisfied with the quality of their food. Interestingly, many of these people all shopped at the same stores. In addition, there were several young families interviewed that receive SNAP benefits (formerly food stamps) who said that they felt they were getting very high quality foods and felt extremely privileged that the benefits allowed them to make more healthy, organic, and local selections. All SNAP users interviewed said that having the benefits and the option to make their own choices motivated them to purchase healthier foods. On the other hand, some mothers expressed concern with the general WIC program (not the WIC Farmers' Market Program) because it encourages foods that are not necessarily healthy by not allowing for more freedom of choice.

"Because of the food stamps, I feel really privileged to get what I want to get. To be able to buy, if I want a piece of salmon, to buy wild-caught and not have to think so much about the price. Or to buy organic and free-range... I don't feel in any way inadequate that I use EBT. I want other moms to see it's ok and it's helping you and helps you have quality food. I could probably afford to sustain us without EBT, but I wouldn't be able to sustain us the way that I'm blessed to be able to, with quality food." – rural Native American mother

"We used to receive WIC but not anymore because we're \$5 over the limit. I was kind of concerned about those kinds of foods. We started going to alternative medicine, acupuncture and stuff, and those guys would tell us that those are the worst foods for your body. Dairy, meat, and eggs, and stuff. They were saying that they're real inflammatory for your body and will scar your arteries. It made me think, wow, the food that the government gives us for free is some of the worst stuff, and that was kind of an epiphany. But we'd already been in the program six years, and you get used to that diet. So we still buy those foods even though we don't get WIC anymore. I think it's more just out of habit and what the kids are used to eating. I'm not sure what to do about that."

- rural Native American mother

During the four farmers' market tours that took place at the Santa Fe and Española Farmers' Markets, group opinions about pricing at the farmers' market seemed to coincide with those found in the individual interviews. In Santa Fe, tour attendees said that they expected the prices would be high before the tour. After the tour, they said that prices were indeed high, but they were impressed with the quality of the food. At the Española market, shoppers had mixed expectations about prices before the tour. At the end, most people said that they thought that prices were quite reasonable, and in many cases, lower than they expected.

FINDINGS—FARMERS' MARKET PERCEPTIONS

Though farmers' markets are great community resources that provide an important food access opportunity, they simply don't work for many low-income working families and seniors in northern New Mexico. For the younger working families in Santa Fe, the farmers' market is not a practical way to get groceries. Limited days and times, distant locations, and high prices make the farmers' market something that doesn't fit into their busy lives. Convenience is extremely important for urban families.

"I enjoyed the farmers' market, but I thought it was expensive and don't go every Saturday. I would actually like to go more often, but our schedule doesn't allow it. And I don't like to spend a lot of money on fruits and veggies that will spoil faster than I can eat them." – urban Asian female

"If local food were available in the grocery store, then I might buy it. Once in a while we go the farmers' market to buy a treat as an activity for the kids, but I don't think of it as a place to shop for my needs." – urban Anglo male

For urban seniors, time may not be as much of a barrier to shopping at the market, but price, transportation, parking, and carrying heavy bundles of produce are huge obstacles. Many urban seniors also felt that the Santa Fe Farmers' Market caters to wealthy people and that it has become far more commercial in its new space than it used to be.

"I went with a neighbor once to the farmers' market. The vegetables and fruitpeaches, broccoli, corn- was very fresh and better than at the supermarkets, but it was too expensive. I got tickets for \$40 to spend there [Senior Farmers' Market Nutrition Program], but still the food cost too much- more than at Farm Fresh or Sunflower or Smith's or even Albertson's. I couldn't buy very much. A lot of people from here can't go to the farmers' market because they don't have vehicles and they don't have a lot of money." – urban Hispanic senior female

"I don't go to the farmers' market in Santa Fe. Even if we could find parking, we seniors can't walk with heavy bundles. That's one of the reasons I don't go. Even if you can find a parking space, it costs money to park."

- urban Hispanic senior female

"Another thing I don't like about the farmers' market: the atmosphere is different than it used to be. Now that's in the new place at the Railyard it's more commercial. It used to be like a small town, direct from the farmer to us. The atmosphere was so much nicer then." – urban Hispanic senior female

For rural people, who are used to driving great distances for their groceries, the location of the market is not such a problem. Because the Española Farmers' Market, the largest farmers' market in Rio Arriba County, is open Mondays from 10 am to 4 pm, however, many rural people said that this market is not accessible for working people. For many of those who could make it to the rural markets of Española or Dixon, lack of product diversity was what kept them from purchasing more food. In addition, some rural people feel that there is not enough signage regarding prices and growing methods at the rural markets, and rather than asking, they simply don't buy. For many people, "organic" is a word that they can trust and understand because of the regulation of certified organic food. During interviews and focus groups, customers suggested that if a small-scale farmer cannot afford to be certified organic, they should use signage with understandable terminology to describe their growing methods such as "no-spray" or "pesticide-free" to make people feel safe about purchasing their products.

"The time [of the farmers' market] is hard because Monday's everybody's working, but then when everybody gets off work it's 5:00."

- rural Hispanic female

"For one thing, when we've gone to the farmers' market it seems like everyone has the same thing. You know, an abundance of lettuce or someone has squash. Everybody has squash. And I think people need to start growing different varieties of things... I would like to see in the farmers' markets, especially in the smaller ones like Dixon, to see people kind of working together... I know it's hard because everybody's doing it as a small business or really not a business, just a personal thing, but I think if you're going to grow to sell, you have to work with other people."

"I went to the farmers' market down here on Monday and it was interesting because the food was local and fresh, but no one had signs about whether it was organic or not and I felt a little conscious about asking. Like the looks I got from the farmers was interesting. I think it's because I don't tend to look like a local very much... Also, I would like to see signs that say the prices. I love being able to walk up to a stand and see exactly what's what on prices."

- rural Hispanic female

VI. NEEDS IDENTIFIED & COMMUNITY-PROPOSED SOLUTIONS

There were several major barriers to accessing locally produced, nutritious, affordable foods that were identified from the body of data collected. The biggest differences in barriers were along lines of age and whether people live in a rural or urban area. In speaking with the participants, the research team collected several ideas of how these barriers could be addressed. The main obstacles that limit people's ability to access these foods center around education; a lack of convenient and affordable shopping opportunities for urban families; high prices and transportation for urban seniors; and a lack of local food outlets for rural people.

TARGET NEED: EDUCATION

In the urban area of Santa Fe, there is a general lack of knowledge among young and middle-aged people about both the benefits of eating locally as well as what local foods are available. Despite outreach efforts on the market's part, there are also still many people who are unaware of the farmers' market or where and when to find it. Among all age groups, there is also a need for more information about how to cook simple, quick, healthy meals using fresh, in-season ingredients. Many families are motivated to make healthy choices for their children, which is why nutrition information and ideas for incorporating more fruits and vegetables into kid-friendly meals will be an essential focus for any educational campaign. During the research, several excellent resources were identified in Rio Arriba County – mothers, librarians, and nutrition educators- who shared great ideas for making nutrition fun, kid-friendly, and easy. In addition, there are health

promotoras who provide in-home diabetes education in rural Rio Arriba County that could be tapped into. With the help of these resources, the NMFMA hopes to create educational tools that can be disseminated through schools, libraries, farmers' markets, health workers, and other community outlets.

Immigrant populations indicated through focus groups and a small number of interviews that they were very interested in accessing local fresh fruits and vegetables, but were not aware of the outlets such as the farmers' markets. This is an excellent group to tap into because many of them are already knowledgeable about how to cook with fresh ingredients. The Española market in particular provides a wide variety of traditional New Mexican and Central American foods that immigrants would be familiar with. Another benefit of this market is that the majority of the vendors speak Spanish, which would help alleviate the language barrier for immigrant shoppers. The research suggests, then, that outreach is needed to immigrant populations in particular that highlights these elements of the farmers' market. There are several immigrant-owned businesses, organizations, and groups that could be a source for disseminating information about the markets in Spanish. In addition, there may be opportunities for farmers to sell excess produce to immigrant-owned businesses for sales to customers that can't attend the farmers' market because of work or family schedules.

The research also identified opportunities for farmers to increase sales at farmers' markets through education. In rural areas especially, several consumers said that they would feel better about purchasing more foods at the farmers' market if there were better signage regarding pricing and growing methods. Though "organic" is a legal term that comes with a high price tag for small growers, there are other ways of conveying your growing practices to customers such as "no spray", "chemical-free," or "grown without pesticides." By letting customers know about their methods up-front, farmers can build consumer confidence in their products and increase sales to those who are uncomfortable with asking questions.

Also at the farmers' market, many customers would like to see an educational demo booth where customers can try out unfamiliar foods and learn about easy ways of preparing them. There are many foods now available at farmers' markets that are not considered common, but have great nutritional value. By teaching people how to incorporate new elements into traditional, culturally appropriate dishes, farmers have the opportunity to increase sales, market diversity is encouraged, and consumers receive the nutritional benefits.

Suggested actions:

- Create recipe cards for farmers to distribute with less familiar crops
- Create public education campaign to motivate healthy, fresh family eating
- Create new education opportunities at WIC clinics, Head Start schools, and other family gathering places
- Support and connect to nutrition and cooking activities already taking place in schools and communities
- Create a Spanish language outreach campaign to educate immigrant populations about the farmers' markets and their availability of traditional foods

- Create a "How to Educate Your Customers" guide for farmers to inspire them to price and label market food with educational information
- Create a demo booth at markets where foods can be tasted and recipes distributed
- Tap into the state library network to distribute information about market events and nutrition education information
- Utilize the network of northern New Mexico health care workers (*promotoras*, nurses, clinic staff, etc.) to educate new mothers about fresh, local produce; create market tours for the health care workers to introduce them to the produce and the growers, and provide them with educational material (like NMFMA's Local Food Guide) to distribute to the mothers

- Financial resources are needed for: creation and production of recipe cards, public education campaign and demo booth pilot; funds are also needed to develop the healthcare network and to produce the Locally Grown Food Guide, as well as to further its distribution potential in successful channels
- Library network can be tapped when there is program information to share (initial contact has been made)

CONVENIENT AND AFFORDABLE SHOPPING FOR FAMILIES

Beyond a need for education, the reality is that many young families lead busy lives and are struggling to make ends meet on stretched budgets. To address these needs, many participants suggested that local foods need to be available at a place that is not out of their way and should be comparably priced to what they see in the grocery stores.

From these barriers, an idea was born to utilize Head Start schools as the access point for fresh, locally grown foods because they serve a large number of low-income families, including immigrants. Parents come to the Head Start schools every day to pick up their children or participate in school activities, as parents are required to fulfill an allotment of volunteer hours. This would address the issue of making the food available at a convenient location. To address price and supply, a number of Santa Fe Farmers' Market vendors said during preliminary interviews that they would be glad to sell unsold produce at discount prices for these shoppers at the end of the weekday market. In addition, other farmers said they would be willing to grow extra food specifically for such a program to be sold at wholesale prices. By taking advantage of parent volunteers and Head Start vans for the transportation of food from market to school, Head Start families would be given the opportunity to develop, manage, and participate in their own market. Food would be transported and sold on a weekday so that there would be no need for cold storage. This program could first be implemented as a pilot in Santa Fe, and then expanded to the Rio Arriba Head Start schools and beyond.

Suggested Next Steps:

• Utilize Head Start as an access point for a pilot to bring food to low-income customers; parent volunteers will coordinate food delivery purchased "wholesale" from the market location and deliver to Head Start for same day pick-up

• The NMFMA plans to try a mini-pilot that will be attempted in the 2011 growing season in Santa Fe, but there will be no funds to help pay for the key parent coordinator or fully develop program with adjunct education pieces such as recipes cards, cooking demonstrations, etc.; Head Start partners are in place in Santa Fe, Española and Albuquerque, and grant funding would allow full pilot exploration in all locations

DISCOUNTS AND TRANSPORTATION FOR SENIORS

The two major barriers affecting urban seniors' ability to access local foods are price and transportation/parking. Though several seniors suggested the idea of having a farmers' market that takes place at a senior center, this may not be feasible for farmers who are already attending several markets, and it does not address the price barrier.

In the two focus groups of Santa Fe seniors, the most popular idea was to take a twoprong approach. First, to address the issue of transportation and parking, the seniors agreed that the best solution was to utilize the city's door-to-door senior transportation services by organizing a group outing from the senior housing facility to the market every Tuesday. The Tuesday market was selected because the city does not operate their vans on weekends, but also because the smaller size and less crowded atmosphere of the Tuesday market is easier and more accessible for seniors than the hectic Saturday markets. The second part of the solution is to establish a senior discount at the farmers' market. After discussing the details with seniors, NMFMA staff spoke to several farmers at the Santa Fe Farmers' Market about the idea, and many were interested in participating in such a program. (At the Española Farmers' Market, price was not a barrier that was mentioned by focus group participants.)

Aside from cooperation from farmers' market vendors to implement a senior discount, the other necessary force will need to come from the seniors themselves. Those seniors who have a passion for getting more local, nutritious food to their peers can begin to act as change agents within their small communities at the senior centers and housing facilities. After a focus group at the Ventana de Vida low-income senior housing center, one senior took on the role of calling the city van to provide transportation each week to the market and informing other residents of the opportunity. Weekly vans continued to provide seniors from the center transportation to and from the market's front door through to the end of the 2010 farmers' market season.

Suggested Next Steps:

• Develop a senior discount program at the Santa Fe Farmers' Market; vendors who choose to participate in the voluntary program can post signage and will be promoted in outreach

• Help senior centers and low-income senior housing groups to coordinate cityprovided transportation and encourage change agent mentors from one senior center to train other senior coordinators

Minimal financial resources are needed to cover the NMFMA's staff time coordinating the program with farmers; the groundwork has already been laid with a number of producers; a small amount of funding is needed to produce outreach materials

LOCAL FOOD OUTLETS AND FOOD PRESERVATION FOR RURAL COMMUNITIES

For many rural residents of northern New Mexico, the biggest barrier to accessing high quality and nutritious produce is the lack of access points. Many people in northern New Mexico are driving upwards of 60 miles or more roundtrip to find high-quality foods. The farmers' markets are an important resource during the growing season, but most are only open from June through October. Because Rio Arriba County grows such a wealth of food, through better education about storing methods, many rural people could enjoy the fruits (and vegetables) of their labor all year long.

Through the process of completing the research, the research team has discovered elders in the community who store a wealth of knowledge about simple and affordable preserving methods like drying. To help people in rural communities continue to benefit from their own nutritious foods during the spring and winter months when fresh produce is not as available, the NMFMA will be tapping into these important resources to make their knowledge available to a wider audience. With the help of community resources such as librarians, health workers, and community groups, this information will be disseminated throughout rural communities.

Traditionally in northern New Mexico, people relied on their own food sources and their neighbors and family for support to put food on the table. This research has identified that in order to create change in these rural communities, it is crucial to empower change agents from within and empower them with the resources and tools that they need to support local food security. By using these change agents to create home garden co-ops, families can coordinate together to grow a diversity of food to share in the bounty together. Additionally, food preservation could be an excellent resource for rural communities. Education at market and other community gathering places about drying, freezing and canning methods could encourage shoppers to stock up while produce is plentiful in the summer and fall months. Funding would also be beneficial to provide community centers with equipment such as food dehydrators for food preservation on a larger scale. Farmers could also use this equipment to preserve their excess produce and make it available throughout the year through corner stores or regional "food hubs."

In addition, during the 2010 season, the Española Farmers' Market began incorporating a Friday evening market into their schedule during the peak of the season. As word spreads to the community, and if sales can reach a level that attracts enough farmers, this could be a great food access opportunity for working families in Rio Arriba County.

Suggested Next Steps:

• Encourage home-garden co-ops

- Encourage food preservation methods such as drying, freezing, canning
- Encourage support of current farmers' markets
- Encourage development of "food hubs" in rural areas, including cold storage and food preservation equipment for area farmers for future redistribution of food
- Encourage "corner store" purchase of fresh food

- Other interested parties to help encourage home-garden co-ops
- Financial resources to develop the 2011 Locally Grown Food Guide that will include information about preserving, drying and freezing gathered from the community

• Financial support and lead "agency" to develop community food hubs and acquire cold storage food preservation equipment in Rio Arriba County (or tap into existing infrastructure)

VII. SUMMARY

The work of the five community researchers who asked food and health-related questions in their own communities in is an important step to understanding more about this segment of buyers in the food value chain of northern New Mexico. By making an effort to gain an accurate understanding of the needs, desires, and barriers that this group of low and moderate income people face when considering food choices, farmers and community stakeholders can continue to address the issues that were brought forward.

In general, it can be said that among the people interviewed, having access to high quality, healthier, affordable food is something that is desired. Barriers such as price, access, and transportation often make this goal difficult. Additionally, lack of awareness about current options for healthy, local food purchase, and/or storage often prevents such purchases, as does a lack of nutrition and food preparation knowledge.

By calling attention to the needs described by this population themselves, it is hoped that this research will allow local food producers who wish to increase their sales to find innovative ways to meet the needs of these buyers who represent a large segment of New Mexico's population.

With the consumer-based research complete, and many ideas for next steps and needed resources identified, the NMFMA will continue to reach out to community partners to disseminate project findings, seek feedback, and formulate plans for the coming years. Additionally, the NMFMA will continue to search for financial resources to capitalize on the human resources and important value chain information that was uncovered during this project.

VIII. APPENDIX

Section 1. Income Statistics/Other Notes About the Communities Researched

While Santa Fe has a median income higher than the state and national average, its Hispanic/Latino households make an average of \$23,000 less than its white households, and nearly \$13,000 less than the national average. Native American families earn even less, with an annual income of nearly half of what white households earn. In Rio Arriba County, home of Española, a small town 25 miles north of Santa Fe, differences are equally striking, with Hispano/Latino households making only \$38,392 on average versus white household' \$54,276 median annual income. Strongly correlated to income disparities, Native American and Hispano/Latino adults and children in New Mexico have much higher rates of food insecurity¹, diabetes², and lower consumption of fruits and vegetables. In addition, there are roughly 16,000 seniors enrolled in the state's Commodity Supplemental Food Program, for those who are age 60 or older sustaining themselves with less than 130% of the federal poverty level.

While populations with lower incomes generally have less access to healthy, fresh food, this reality stands in stark contrast to the rich agricultural history of Northern New Mexico that is based in family farming and ranching, with fields and pastures irrigated by an advanced system of acequias (communally managed irrigation ditches). Until 50 years ago, most people in the area farmed, and most sales of agricultural products were to local people. However, as northern New Mexico's art and tourism economy grew, as industrial agriculture lowered food prices, and as the influx of newcomers raised land prices, fewer and fewer families focused their time on agriculture. At the same time, a small group of dedicated farmers, ranchers, and local food supporters have struggled to maintain and revitalize the local food economy. Their efforts have resulted in the blossoming of farmers' markets in the state and a growing core of producers able to sustain themselves from their agricultural pursuits. However, the high price of production has resulted in high quality foods that are primarily consumed by the wealthier, and generally whiter, residents.

¹ According to the USDA Economic Research Service, Hispanic households are nearly twice as likely to experience food insecurity as white, non-Hispanic households. Nord, Andrews and Carlson. *Household Food Security in the United States*. 2008. http://www.ers.usda.gov/Publications/ERR66/

² The American Diabetes Association has found that the prevalence of diabetes is 10.4% among Hispanic/Latinos and 16.5% in Native American populations compared to only 6.6% of the white, non-Hispanic population. http://www.diabetes.org/diabetes-statistics/prevalence.jsp, accessed (May 5, 2009).