

# **Closing New Mexico's Food Gap: A report on food access in New Mexico**



**Submitted to  
Governor Richardson and  
the New Mexico State Legislature  
by the NM Food Gap Task Force  
November 30, 2008**

*"Linda and I became grocery store owners not because we thought it would make us rich, but because we know it's important. I've seen it happen again and again in rural states like New Mexico. First a town loses its bank, its general store, then its grocery store, and eventually loses its school. Once that happens, it's no longer a town and people have to find a new community to call home."*

--Brian Moore  
State Representative, District 67  
Grocery Store Owner, Clayton, NM

# **NM Food Gap Task Force Final Report**

## **Executive Summary**

### **Introduction**

Grocery stores and the food system of which they are a part are a critical cornerstone to the health and wealth of New Mexico's communities, both urban and rural. Unfortunately, many New Mexicans do not have easy access to adequate, affordable, and healthy foods. Fully one third of New Mexico's counties are designated as having low food access and New Mexico is the second most food insecure state in the nation. The causes and adverse impacts of this "food gap" are varied and grave, but the opportunities to begin to close the food gap are also numerous and have great potential to contribute to the well-being of all New Mexicans.

At the request of the New Mexico State Legislature, the Governor-appointed Food Gap Task Force has prepared a report which defines the scope and causes of the "food gap" in New Mexico and provides recommendations for how to improve food access in rural and underserved urban communities.

### **Findings**

#### *Scope of the Food Gap in New Mexico:*

- One third of NM's counties are classified as low food access or food deserts.
- Many rural residents drive as far as 70 miles each way to access the closest full-service grocery store. People that do not have automobiles or are not able to drive often pay friends or relatives to drive them to the store or may be forced to hitchhike.
- A study conducted by the non-profit Farm to Table found that the same basket of food that costs \$55 in an urban store costs \$85 in a small-scale, rural store.

#### *Impacts of the Food Gap:*

- Scientific studies show that the food environment (the kinds of foods easily accessible in a community) has a direct impact on health. Individuals without grocery stores in their community eat less fresh fruits and vegetables and have higher rates of obesity, diabetes and heart disease.
- Diabetes costs New Mexicans \$1.2 billion each year. Conservative estimates indicate that improving residents' diets could save \$140 million a year.
- Without adequate food retail in their communities, residents must spend their food dollars elsewhere, taking money and jobs out of rural communities. There is a correlation between lack of food retail and the dissolution of rural communities.

#### *Causes of the Food Gap:*

- Small scale stores in rural and underserved urban communities face a number of barriers to offering fresh, healthy foods. These include: lack of refrigeration, lack of skill in handling perishable products, lack of skilled labor and lack of access to capital.
- Distribution also poses a problem for rural stores and other food outlets. Only one full-service food distributor serves rural New Mexico stores. Distributors often have minimum purchase requirements that are out of reach for small-scale stores. Distributors are also increasingly charging hefty fuel surcharges or refusing to deliver to distant areas.
- These challenges are not only faced by stores, but also by schools, senior centers and food pantries.

#### *Successful Models for Closing the Food Gap:*

- The town of Tatum worked with Lea County and the federal government to purchase a retail space and grocery store equipment that is being leased to an operator, ensuring that Tatum residents do not have to drive 20 miles or more to access a grocery store.

- Bashas', an Arizona-based grocery store chain, has worked with tribal governments to open stores in seven communities throughout the Navajo Nation. Bashas' hires nearly all local workers and gives 25% of the store's profits back to their communities.
- La Montanita, a member-owned food cooperative with four stores in New Mexico, has established a distribution system that picks up locally produced food products and delivers them to stores, restaurants and institutions throughout the state.
- Schools and stores respectively have created buying cooperatives that have helped them to obtain lower food prices and receive distribution services.

## **Recommendations**

**1. Continue to Convene the Food Gap Task Force:** further research and dialogue among food gap stakeholders is necessary to fully address the issue. The Task Force should be reconvened for a minimum of one year and membership should be expanded to include additional stakeholders and experts.

**2. Create Fund for Food Retail Pilot Projects:** there is significant empirical evidence that shows that investment of public dollars in food retail succeeds in increasing food access in underserved communities. The Task Force recommends that the state government create a \$100,000 fund, administered by the NM Department of Agriculture, to invest in a minimum of four pilot projects for food retail. Monies can be used to purchase equipment for lease to store owners, to pay for store renovations and/or to provide technical assistance.

**3. Create Fund for Food Distribution Pilot Projects:** Given the size of the state and its dispersed population, innovative distribution systems must be developed to ensure that rural stores are able to obtain perishable products at a reasonable price. The Task Force recommends that the state government create a \$100,000 fund, administered by the NM Department of Agriculture to invest in at minimum three distribution pilot projects. Monies can be used to design more efficient transportation services—both for food outlets and to local farmers—and to purchase equipment for lease to distribution enterprises.

**4. Include Food Retail as an Eligible Economic Development Activity:** currently retail is excluded from most economic development assistance opportunities. Given the importance of access to fresh and healthy food and the capacity of independent food retail to circulate money in the local economy, the Task Force recommends that the legislature amend state statute to include food retail as an eligible economic development activity.

**5. Investigate Existing and Potential Incentives for Food Businesses:** Certain incentives may prove useful to encourage food businesses to locate in underserved areas. The Task Force recommends that it work with the Economic Development Department (EDD) and other departments to provide information to food businesses on how they may take advantage of existing incentives. The Task Force and EDD should also investigate the development of new incentives as necessary.

**6. Coordination among Agencies on Food Programs:** a number of state agencies are involved in public food programs, including ALTSD, CYFD, HSD, DOH, NMDA, and PED. These agencies have already begun to work together on various issues. The Task Force recommends that these initiatives continue and that the agencies continue to expand collaboration (see full document, p. 16 for specific examples).

**7. Investigate Federal Funding Opportunities:** as part of its continued work, the Food Gap Task Force should investigate and help public and private entities in New Mexico to obtain funding from existing federal programs related to food retail and distribution (see full document, p.16 for specific examples).

## **Table of Contents**

1. Introduction	p. 3
2. Executive and Legislative Context for the Report	p. 3
3. Defining the Term “Food Gap”	p. 4
4. The Scope of the Food Gap in New Mexico	p. 5
5. Impact of the Food Gap on the Health of New Mexican Communities	p. 5
6. Causes of the Food Gap	p. 6
6.1 Gaps in Food Retail	p. 8
6.2 Gaps in Food Distribution	p. 9
6.3 Infrastructure and Distribution Gaps for Public Food Service	p. 9
7. Successful Models: Grocery Store and Food Retail Development	p. 10
7.1 Bashas’ Dineh Markets	p. 10
7.2 New Store in Tatum, NM	p. 11
7.3 Pennsylvania Fresh Food Financing Initiative	p. 11
8. Successful Models: Distribution	p. 12
8.1 Retail and Institutional Buyer Cooperatives	p. 12
8.2 La Montanita’s Food-Shed Project	p. 12
8.3 Food & Nutrition Services Bureau Brings Local Food to Schools	p. 13
8.4 Clayton Grocery Store as Food Hub	p. 14
9. Successful Models: Alternative Food Outlets	p. 14
9.1 Farmers’ Markets	p. 14
9.2 Buying Clubs	p. 14
9.3 Farm to School and On-Farm Storage Infrastructure	p. 15
10. Recommendations	p. 15
11. Conclusion	p. 17
Appendix A: Acknowledgements	p. 18
Appendix B: List of Task Force Members	p. 19
Appendix C: House Joint Memorial 10	p. 20
Appendix D: Endnotes and Sources Consulted	p. 22

## **1. Introduction**

Grocery stores and the food system of which they are a part are a critical cornerstone to the health and wealth of New Mexico's communities, both urban and rural. Unfortunately, many New Mexicans do not have easy access to adequate, affordable, and healthy foods. Fully one third of New Mexico's counties are designated as having low food access and New Mexico is the second most food insecure state in the nation. The causes and adverse impacts of this "food gap" are varied and grave, but the opportunities to begin to close the food gap are also varied and have great potential to contribute to the well-being of all New Mexicans.

At the request of the New Mexico State Legislature, the Governor-appointed Food Gap Task Force has prepared the following report which defines the scope and causes of the "food gap" in New Mexico and provides recommendations for how to improve food access in rural and underserved urban communities. The following report provides a brief but thorough explanation of the extent, causes and impact of the food gap in New Mexico. It then provides examples of successful public, private and public-private projects that have helped to improve food access both in New Mexico and nationwide. It concludes by outlining a set of recommendations that can be implemented by the State Government to expand food access for rural and underserved New Mexicans. The Task Force strongly believes that executing these recommendations will not only significantly increase food security, but will also promote a vital community food system.

## **2. Executive and Legislative Context for the Report**

House Joint Memorial 10, introduced by the late Manny Herrera, then Representative from House District 39 and then passed in the 2007 Legislature, called for the creation of a task force to investigate ways to improve the access to affordable, healthy and culturally appropriate food for rural and underserved urban New Mexicans. It requested that the Governor appoint representatives from several state and public agencies, the grocery industry and agricultural and food policy not-for-profit organizations to serve as members of the task force.

The New Mexico Food and Agriculture Policy Council, a collaboration of organizations, agencies, businesses and individuals involved in the food and agriculture sectors, along with other concerned partners, presented the case for such an investigation as an outgrowth of efforts to draw attention to the problems of hunger and food insecurity in the State. The Policy Council had previously issued two reports on food access and availability. One of these, *Closing New Mexico's Rural Food Gap*, released in February, 2006, had found that the scarcity of grocery stores and lack of public transportation created considerable challenges for rural populations to access healthy and affordable foods. This was particularly true for seniors and low-income individuals and families. The second report, released in 2007, updated the first and laid out more evidence of these challenges and some opportunities that could ensue. The conclusions in both reports were informed by surveys and community meetings in selected areas which served to provide first-hand data on the extent of the food gap.

When the Policy Council presented these reports to Representative Herrera, he and several co-sponsors worked with the Policy Council to draft HJM 10. The memorial urged the Governor

and Legislature to investigate economic incentives and financing mechanisms the State could provide to assist grocery store and food outlet owners to develop new or enhance existing operations in rural and underserved urban areas. It also indicated the need to explore options for improved transportation and distribution services that would make food more accessible and available.

In 2008, the Governor effectuated the memorial by making appointments to the Food Gap Task Force and delegating oversight of the body to the Department of Agriculture. Since that time the members of the Task Force have met regularly to further research the issue and develop recommendations.

### **3. Defining the Term “Food Gap”**

As awareness grows about the close link between nutrition and health, throughout the country public and private service organizations are raising concern over how the food environment, rather than individual behaviors, affect people’s nutrition. A number of terms have been developed to describe this issue. For example, the US Department of Agriculture measures the level of food insecurity: individuals or families who on a regular basis are not sure where their next meal will come from. The American Rural Sociology Society and others have utilized the term “food desert” to describe geographic areas that lack grocery stores. This report will use the term “food gap” as it embraces the broad set of issues that New Mexicans face with respect to food access.

A “food gap” refers to a barrier, usually financial or distance-based, that obstructs people from accessing sufficient and nutritious foods. A food gap exists when one or more of the following are true:

- There are not enough food outlets in a particular area (e.g. in Mora County has only one full-service grocery store).
- Food outlets that exist do not meet the needs of local residents (e.g. stores in areas with Native American populations do not carry traditional foods such as mutton).
- Nutritious foods, particularly fresh fruits and vegetables, are not available or affordable (e.g. many communities depend on convenience stores which generally carry no fresh produce).
- Food outlets are not accessible via existing transportation networks (e.g. vans for senior citizens do not accommodate grocery shopping).

#### **The Perplexing Link Between Food Insecurity and Obesity:**

While it seems contradictory to say that food insecurity often coincides with obesity, a number of scientific studies have shown that lack or fear of the lack of regular access to food contributes to high rates of obesity in low-income populations for the following reasons:

1. Low income people are least served by full-service grocery stores that provide ample access to fresh and unprocessed foods.
2. Populations with limited food budgets are most likely to choose high calorie, low-cost foods.
3. Food insecure parents will often skip meals to provide for their children, creating a metabolic reaction that causes weight gain.
4. The stress associated with food insecurity also contributes to weight gain.

Source: Food Research Action Center. October, 2005. *Food Insecurity, Obesity and Federal Nutrition Programs: Understanding the Linkages.*  
[www.frac.org/pdf/obesity05\\_paper.pdf](http://www.frac.org/pdf/obesity05_paper.pdf)

## **4. The Scope of the Food Gap in New Mexico**

New Mexico has seen a significant concentration of food retail over the past thirty years. Currently, more than one third of New Mexico's counties have been identified either as being "food deserts" or having "low food access." In a rural context, a "food desert" is a county where nearly all residents have to travel more than 10 miles to a full-service grocery store. "Low food-access" signifies a county where more than 50% of residents have to travel more than 10 miles to a grocery store.<sup>i</sup> In New Mexico this reaches extremes. Participants in focus groups conducted by the non-profit Farm to Table indicated that they had to travel as far as 70 miles each way to access a grocery store. Partially as a result, New Mexico has the second highest rate of food insecurity in the nation.

The distance barrier to food access is aggravated by recent increases in fuel costs as well as the lack of public transportation in rural communities. Rural New Mexicans spend between 8 and 16% of their income on gasoline, compared to 4.9% nationwide. Every dollar spent on gas is one less dollar available for purchase of nutritious foods. Further, in New Mexico, nearly 10% of adults (110,000 people) do not own an automobile. Participants in focus groups observed that the lack of transportation in some areas may force rural residents to hitchhike to grocery stores.

Even those residents that live close to smaller scale stores may be drawn out of their community because of price differences between those stores and larger supermarkets and discount stores. Farm to Table conducted a study of food prices based on the USDA's market basket and found that the same list of nutritious items that cost \$55 in large, urban stores cost as much as \$85 in smaller, rural stores. While some of this price difference may be attributed to lack of competition in small communities, it more often reflects the higher prices small stores pay for their products as a result of smaller orders and higher distribution costs.

## **5. Impact of the Food Gap on the Health of New Mexican and their Communities**

The less money that people have available to spend on food, the less able they are to purchase fresh foods. Per calorie, fruits and vegetables are significantly more expensive than fats, processed carbohydrates and sweets. According to a study published in the *Journal of the American Dietetic Association*, during the course of a two year study ending in 2007, the price of the most nutritious foods increased 19.5% while the price of junk foods decreased 1.8%.<sup>ii</sup> In fact, nationwide, the cost of fresh fruits and vegetables has increased over 77% since 1989 while the cost of sweets and fats has decreased 33%.<sup>iii</sup>

Price differentials between rural and urban stores and between nutrient-rich foods versus calorie rich foods have a severe impact on rural populations. In rural New Mexico, more than one in five residents falls below the poverty line. Further, according to a study conducted by NM Voices for Children, the actual amount of income needed to cover the basic necessities is between 136% and 247% of the poverty threshold (depending on geographical area and other family characteristics). More than 30% of all New Mexican families make less than the 136% threshold and nearly 50% below the 247% threshold of the poverty level that the "Bare Bones Budget"

indicates is necessary to provide for their families.<sup>iv</sup> For low-income people who depend on public programs such as WIC, food stamps and Social Security to supplement their food budgets, the benefits provided do not go as far in stores with higher costs or for more nutritious foods.

Numerous studies have shown that poor diets (especially those low in fresh fruits and vegetables) are the leading cause of obesity, diabetes and heart disease. Studies have also found that the “food environment” (the type and price of foods that are easily accessible to a given population) have a significant impact on peoples’ diets. For example, a study published in the American Journal of Epidemiology found that individuals without full-service grocery stores close to their homes were 25-46% less likely to eat a healthy diet (even after adjusting for demographic and socioeconomic factors).<sup>v</sup> Similarly, a UCLA study found that people living in areas with more convenience stores and fast food restaurants than grocery stores were significantly more likely to be obese, and had higher rates of heart disease and diabetes.<sup>vi</sup> Further, according to the American Rural Sociological Society, residents living in rural areas where they must travel more than 10 miles to a grocery store were more likely to lack adequate fruits, vegetables, proteins and dairy in their diets than the general population.<sup>vii</sup>

The health impacts of this food gap in New Mexico are clear. The Department of Health has found that nearly 60% of all New Mexicans are obese or overweight and in some rural counties this number is over 70%. According to NMSU Cooperative Extension, more than 130,000 (one in 14) New Mexicans have Type-II diabetes.<sup>viii</sup>

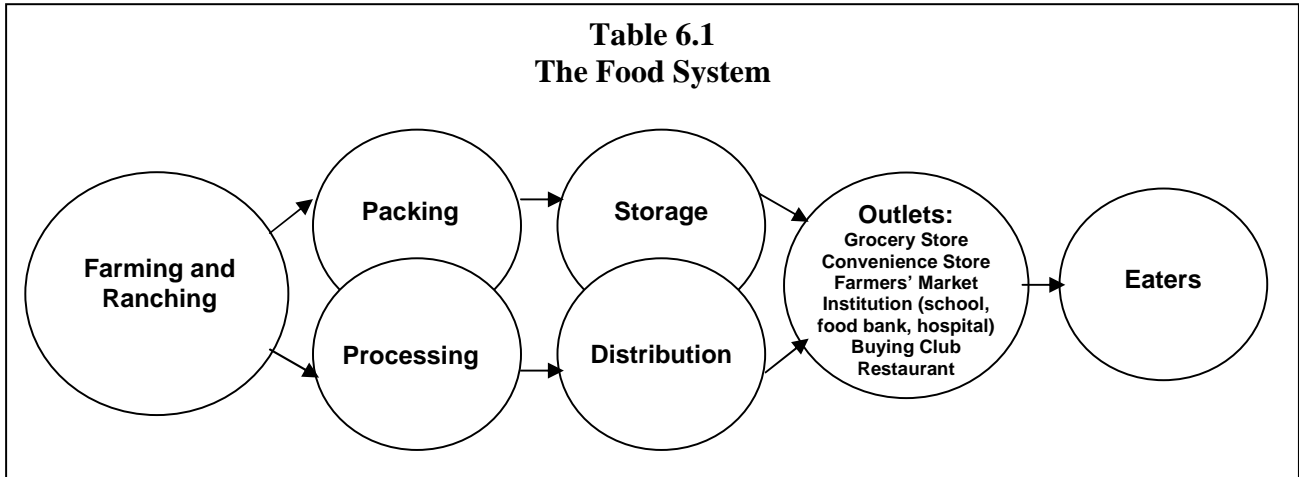
The health challenges associated with poor diets cause a great deal of pain and suffering to those unable to access and/or afford healthy foods. Further, the health care costs associated with treating diet-related diseases are tremendous. In 2006 the NM Department of Health found that the state spends \$1.2 billion on healthcare costs to treat residents suffering from diabetes. It further found that 1 in 7 cases (15%) of diabetes can be prevented with diet and exercise, which signifies that investments in food access could conservatively save over \$140 million per year.<sup>ix</sup> Other studies suggest that up to 58% of diabetes cases can be prevented through improved diet and exercise.<sup>x</sup>

Besides the emotional and monetary cost of lack of food access to individuals and state healthcare programs, food gaps also signify a lost economic opportunity for local communities. While the average family spends approximately 20% of their income on food, low-income families spend as much as 37%.<sup>xi</sup> Without locally-owned food outlets, community members must spend their food dollars outside of their communities, taking jobs and profits out of rural and underserved urban communities.

Representative Brian Moore, who has represented a rural district for nearly eight years, has observed that the loss of grocery stores in communities is often correlated with or followed by the loss of the bank, gas station, and eventually their school. In other words, there is a relationship between the closed doors of local grocery stores and the erosion of rural communities.

## **6. Causes of the Food Gap**

To understand why many rural and underserved urban communities lack access to healthy, affordable and culturally appropriate foods, it is important to look at the problem within the context of the whole food system. The food system refers to all the processes involved in getting food from the farm to the table. This includes agricultural production, storage and packaging of raw agricultural products, food processing, distribution, retail and consumption. (See Table 6.1). These processes can be done by one entity or many, but a gap or disconnect in any part of this process will impede the ability of the end consumer to get the fresh, nutritious foods they need.



While New Mexico has a rich history of agriculture and food production, and continues to have a strong agricultural sector, changes in the sector have meant that less and less of what is grown in New Mexico is consumed in New Mexico. Because New Mexico's mid-sized and large farmers and ranchers primarily sell in to the national market, even in strong agricultural areas it is difficult to find locally produced fresh fruits, vegetables, dairy or meat. In many cases this is due either to the lack of processing infrastructure in the state or to complex distribution systems that send raw product to a central distribution facility, usually out of state, before being distributed to food outlets. Thus, New Mexico's farming and food processing industries present both opportunities and obstacles and opportunities to solving food access issues. However, because of the complexity of these issues and their consideration in other venues, this report focuses primarily on the last three parts of the process: distribution, storage and retail. The Task Force values the contribution of local agriculture to our food system and provides several examples of innovative retail, distribution and storage solutions that include the incorporation of locally grown foods.

### **6.1 Gaps in Food Retail**

As mentioned above, one of the most significant barriers to food access in rural and underserved urban areas is the distance between people and full-service food outlets. While people in this situation are likely to drive as far as they must to reach a grocery store, for those without cars or money for gasoline, this is not an option. In such cases, communities are most likely to get food

from the closest small-scale store which is often a gas station convenience store. These stores may carry fresh dairy but are unlikely to carry fresh fruits or vegetables.

Perishable products pose significant problems for all small-scale food retailers:

- Refrigeration: most small-scale stores have extremely limited refrigeration space. The appliance stock is old and lacks energy efficiency. The resulting energy bills make it hard for store owners working on one percent margins to justify refrigerating products that are not high-profit. In an interview with Farm to Table staff, one store owner commented that she was on the verge of shutting down because she could not pay her energy bills.
- Turn-over: small sales volumes make it difficult for small-scale stores to manage perishable inventory. This is compounded by the fact that small stores, particularly in rural areas are unlikely to get frequent deliveries of produce, fresh dairy or meat. Further, small stores have little capacity to absorb loss when products spoil before being sold.
- Skill: managing perishable inventories thus requires a specific set of skills and knowledge that store owners who are accustomed to carrying only shelf-stable products are less likely to possess.
- Labor: Handling perishable products also requires significantly more labor than packaged goods and a store that is operated only by its owner may be unable to accomplish the additional task. Finding adequate and skilled labor is cited as a problem even for larger grocers in rural communities. A store owner in Santa Rosa indicated that the quality of the labor pool had declined significantly in recent years. He attributed this decline to the fact that chain restaurants and hotels built in recent years along I-40 had attracted his previous labor pool and that the remainder had not been adequately prepared by the education system to enter the work force. Independent and small-scale stores are unlikely to provide the kinds of benefits that larger corporations or franchises are able to offer.
- Access to Financial Capital: Another challenge for independent stores in rural communities is access to capital. While most store owners recognize that improving refrigeration systems and other store infrastructure would increase sales and decrease operating cost, they are finding it harder and harder to get the loans they need to finance these renovations. For example, the store owner mentioned above wants to expand his store but says, “It would take me almost \$3 million to expand, but the days of the small town banker who would give you a loan, because he knows who you are, are over.”<sup>xii</sup> He is not confident that his current bank would even consider a loan request.<sup>1</sup> Moreover, many small-scale store owners have outdated accounting systems. This makes it difficult for them to apply for loans or other small business assistance.

<p><b>Table 6.2</b> <b>Food Retail Facts:</b></p> <ul style="list-style-type: none"><li>▪ Accounting for labor, inventory and operating costs, even successful grocery stores operate at a 1.9% profit. (Food Marketing Institute)</li><li>▪ Stores expect a 10% shrink on perishable products (amount of product loss due to spoilage).</li><li>▪ It has been calculated that a 10% reduction in energy costs for the average supermarket is equivalent to increasing net profit margins by 16%. (EPA)</li></ul>
---

## **6.2 Gaps in Food Distribution**

As mentioned above, one of the reasons small-scale stores in rural New Mexico often do not carry fresh and perishable products is the difficulty in getting regular deliveries, including:

- Minimum purchase requirements: many food service distributors require stores to purchase a minimum amount of product before they will deliver an order. For example, Sysco requires a \$2,000 minimum. This may be the equivalent of a month's worth of purchases for a small-scale store and the store may not have the cash on hand to purchase this volume.
- Limited number of distributors to rural areas: as fuel prices increase, distributors are refusing to deliver to outlying areas or charging high transportation surcharges. There is currently only one full-service grocery distributor that covers all of rural New Mexico. This distributor is cooperatively owned. To become a member of Affiliated Foods, a store owner must pay a \$12,500 one-time membership fee, present a line of credit to cover the equivalent of two weeks worth of purchase, and make \$5,000 minimum orders. This may be beyond the reach of many small-scale stores. Small stores can purchase from the food service arm of Affiliated, but prices are somewhat higher than through the grocery distribution service.
- Case size: distributors often only sell produce in entire cases which may contain more of a particular item than the store can sell before it spoils.
- Loading docks: many small-scale stores do not have the kind of loading docks needed to accommodate trucks used for distribution by large companies.

## **6.3 Infrastructure and Distribution Gaps for Public Food Service Institutions**

Distribution difficulties are not limited to stores but also to schools, senior centers and food pantries in rural areas. These institutions function as critical food outlets for the most vulnerable members of rural communities, but like small-scale stores, they often lack the purchasing power needed to get deliveries. The distributors that will serve these smaller institutions are now charging transportation surcharges to compensate for high fuel costs. These additional costs can be crippling to programs that operate on tight, fixed budgets. The Director of the Volunteer Center which runs a food pantry in Silver City indicated that they had paid nearly as much to get USDA commodities delivered from Albuquerque as it would have cost to purchase the food from a grocery store in town.

Like stores, many of these institutions also lack adequate infrastructure. For example, many school kitchens have antiquated equipment for both cooking and refrigeration, limiting the amount of fresh food preparation they are able to do on site. This combined with shrinking budgets relative to food prices has often forced school food service providers to serve mostly pre-cooked and pre-processed foods.

While all of these gaps in the existing food system present serious barriers to food access, there are a number of successful initiatives within the state and across that country that provide models for how public-private partnerships can increase food access in rural and underserved areas. The following two sections present examples of such projects in both food retail and distribution.

## **7. Successful Models: Grocery Store and Food Retail Development**

Despite the many difficulties involved in developing new or renovating existing food retail, there are many examples both within the state and across the country that illustrate what can be accomplished. This section will provide three different initiatives that bring healthy food retail to underserved communities. One of the consistent factors in each of the three cases is the need for concerted efforts of a variety of stakeholders including the community members, community groups, dedicated entrepreneurs and government entities.

### **7.1 Bashas' Dineh Markets**

On the Navajo Nation residents found it typical to drive at least three hours round trip just to access a grocery store. Dineh Cooperatives Inc. (DCI), a Navajo community development corporation, seeing this as a problem set their sights on building the Navajo Nation's first shopping center. They were able to obtain more than \$3 million in federal funding and began construction on the Tseyi Shopping Center in Chinle, AZ in the late 1970's.

The most difficult challenge DCI faced in the development process was finding a supermarket chain willing to anchor the shopping center. Many of the major chain stores turned DCI away. Bashas, one the last supermarkets on their list, seemed to be their last hope. Much to their surprise, Chairman Eddie Bashas agreed to work with them to build a store.

Bashas agreed to this venture because it recognized an untapped market on the Navajo Nation, but it took the venture on as more than a shrewd investor. Bashas committed to returning 25% of store profits to DCI for community improvement projects. The store quickly became one of the most profitable stores in the chain. Further, the store boosted employment on the Nation, employing 95% tribal members in its first few years. Bashas' facilitate training and team building among the Nation's residents by sending new store employees to Phoenix, Arizona to receive training provided by current Phoenix-based Bashas' managers.

Finally, while it is good business sense to tailor the store to customer demands, Bashas went one step further by ensuring that not only did the 28,000 square foot store carry a variety of traditional foods (including cuts of mutton, fry bread ingredients, dairy alternatives, animal chow, and an assortment of fresh and canned vegetables) but it also hung signs in Dine and posted pictorial signs.

Thanks to the success of this collaboration among Bashas', the federal government, the tribal government and DCI, Bashas' now has seven locations on the Navajo Nation, including Tuba City and Window Rock, Arizona and Crownpoint, New Mexico. A portion of each stores' profits continues to be given back to the Nation through DCI. Bashas has brought nutritious food access, profit sharing, and sustainable economic development, to the Navajo Nation. Bashas is currently looking to expand further into the southwest and to continue its work with tribal communities.

## **7.2 New Store in Tatum, NM**

Thanks to a strong public-private partnership, the 683 residents of Tatum, New Mexico now have a grocery store in their community. A number of years ago, the Town of Tatum had received a grant from the Housing and Urban Development Department which it combined with funding from Lea County to purchase a building containing a 6,500 square foot retail space. Tatum leased the space to a grocery store owner in 2005, but because the store was undercapitalized, it soon went out of business. This left residents driving over 20 miles to the closest store. According to Tatum's mayor, Don Mullins, "Most Tatum residents and those folks who live right around Tatum are in the low- to middle-income brackets...[so] even driving to Lovington is getting hard with the price of fuel."<sup>xiii</sup>

Having learned from the previous store owner's difficulty in obtaining capital, Tatum solicited \$50,000 from the Lea County Commission to purchase equipment such as refrigerators and cash registers. The Economic Development Corporation of Lea County assisted the town in purchasing this equipment and finding a willing operator. In 2008 the building and equipment were leased as a unit to the new store owners. The owners have contracted with Affiliated Foods which provides the store with regular deliveries of a full line of products. The store opened November 19, 2008.

## **7.3 Pennsylvania Fresh Food Financing Initiative**

These kinds of public-private partnerships in food retail are happening throughout the nation. The largest such initiative was launched by the Pennsylvania government which created a statewide economic development initiative specifically aimed at improving food retail in rural and underserved urban communities. In 2003, the state committed \$20 million in funding to the Fresh Food Financing Initiative, which in turn leveraged an additional \$60 million. These funds are used to provide both grants and low-interest loans to entrepreneurs committed to revitalizing existing stores or developing new stores in communities that lack adequate fresh food retail. In the first two years of the program, funding was provided to 22 stores in both rural and urban communities and over 2,500 new jobs were created.

Romano's Grocery was one of the stores assisted by the project. With an investment of just over \$200,000 the 1,500 square foot store was completely renovated. Prior to the renovation the store carried primarily packaged foods with some fresh dairy. The centerpiece of the store is now a produce case that carries over twenty different varieties of fresh fruits and vegetables. Low-fat dairy and 100% fruit juices are also offered. What is particularly unique about this renovation, however, is that while its primary goal was to provide fresh, healthy foods, the project went the next level to do so in a sustainable way. The new refrigerators and lighting systems put in the store had top-end energy efficiency ratings and the majority of building materials used were recycled or sustainably harvested. The energy efficient appliances have offered significant savings to the owner, allowing him to invest more in his perishable product offerings. The success of the project is evident both in significant increases in sales of fresh foods and in the fact that Romano's competitors (other corner stores in the area) have begun to offer more fresh fruits and vegetables. This kind of project may be applicable to underserved urban areas, such as the Southeast Heights and South Valley of Albuquerque.

## **8. Successful Models: Distribution**

As mentioned earlier, one of the biggest barriers food retailers in rural areas face is obtaining fresh products on a regular basis. Nonetheless, four examples indicate how these issues can begin to be addressed.

### **8.1 Retail and Institutional Buyer Cooperatives**

One tool that independent grocery stores and smaller institutions have used to deal with the issue of scale in distribution is to conglomerate their buying power through collaborative arrangements. In some cases these arrangements take the form of formal cooperatives. One such coop is Affiliated Foods which was founded in 1946 by several independent grocers operating in the Texas panhandle area. They came together in response to the refusal of larger food manufacturers to sell to smaller stores as chain groceries were on the rise. In the last 60 years, the cooperative has grown to serve over 1000 stores in Texas, New Mexico, Oklahoma, Kansas, Colorado, Arizona and Wyoming. Affiliated owns a 1.2 million square foot distribution center, a milk plant and a food manufacturing facility.

As mentioned earlier, however, the initial investment required to be a member of Affiliated Foods or similar distributors, may be out of reach for most smaller store owners. To overcome this kind of barrier, a number of small stores in Kansas have banded together in an informal collaboration through which they make collective orders to a distributor. The distributor delivers to one of the stores that in turn uses its small refrigerated truck to make deliveries to the other stores.

A group of 14 New Mexico school districts have created a similar arrangement, called the NM School Nutrition Cooperative, which they have used to achieve volume discounts on paper goods, non-perishables, grains and dairy (fresh fruits and vegetables are not yet included). In July 2008 they entered into a multi-year contract with Zanios Food Service Inc. who will distribute a common set of products to each of the districts (in various quantities to serve individual school needs). The contract is reviewed annually and re-awarded based on performance standards of the Co-op.

### **8.2 La Montanita's Food-Shed Project**

In 2006 La Montanita, a member-owned food cooperative, launched its Regional Food-Shed Project with the goal of helping local producers deliver their products to consumers. In 2007, La Montanita leased a 10,000 square foot warehouse (called the Cooperative Distribution Center or CDC) and two refrigerated trucks. These trucks pick up local agricultural and value-added products throughout the state and distribute them to their four retail stores, and other groceries, restaurants and institutions. Producers can choose to sell their products to the Cooperative Distribution Center which then takes the responsibility for selling it to its wholesale buyers; alternately the farmer, rancher or food producer may develop their own customer base and pay a simple transport fee. Because there is not currently a large enough volume of local product sales to support the entire warehouse, the Cooperative Distribution Center also moves some nationally produced products purchased direct from wholesalers.

In its second year of operation, the Cooperative Distribution Center has moved over \$846,533 worth of products (FY 2008), serving 53 vendors and over 20 wholesale customers. It currently distributes to customers in Albuquerque, Santa Fe, Taos, Las Cruces, Silver City, Gallup, Durango and the La Plata region in Colorado. It makes pick-ups in areas surrounding or en route to these destinations and in eastern Arizona, west Texas and southern Colorado. In southern Colorado, La Montanita buys potatoes from a mid-sized farmer who also operates a Community Supported Agriculture program. In a Community Supported Agriculture program, customers purchase an annual membership which entitles them to a share of the farm's harvest, usually provided on a weekly basis. To supplement its offerings, the CSA purchases products offered by the Central Distribution Center that the farm cannot provide such as citrus fruits. This is a model that could be used in rural areas of New Mexico that both produce agricultural goods and lack access to many fresh products.

While the Central Distribution Center's product line is currently focused on natural and organic products, La Montanita is interested in expanding its offerings to better serve low-income rural communities whose residents may not be able to afford their current line. The CDC is also exploring the possibility of increasing the efficiency of its pick-up and delivery systems by creating regional depots that could be accessed by both producers and retailers, either through their own vehicles or with smaller trucks. This would require, however, cold and dry storage that currently does not exist.

### **8.3 Food and Nutrition Services Bureau Brings Local Food to Schools**

In an innovative collaboration with the New Mexico Department of Agriculture and the school food service providers, the Food and Nutrition Services Bureau (a division of the Human Services Department) is using its distribution system to help New Mexico farmers deliver their fresh produce to schools. Thanks to a House Joint Memorial passed in 2003, the NMDA and Farm to Table have been working to help school districts buy fresh fruits and vegetables directly from New Mexico's farmers. Because of the large distances in the state, it can be difficult, however, for farmers to get their produce to schools. The FNS Bureau is helping to solve this problem by offering to pick up produce from farmers along their USDA commodities distribution route. They bring the fresh fruits and vegetables back to their central warehouse in Albuquerque—at no cost to farmer or school—for further distribution to nearby school districts.

### **8.4 Clayton Grocery Store as Food Hub**

Clayton's Ranch Market goes beyond its own retail sales to ensure that the local community has access to fresh foods. When the Clayton School District food service was having a hard time getting a good price on milk, the Ranch Market agreed to be its supplier. As a member of Affiliated Foods, which owns its own dairy plant, Ranch Market is able to get a special low price on milk and pass that on to the schools. They have also partnered with the elementary school in the Fresh Fruit and Vegetable Snack Program helping to provide a fresh snack before kids go home from school. Further, for several summers, Ranch Market opened up its parking lot, at no cost, to the local farmers' market. Rather than fear competition on produce sales, Ranch Market felt it would be a good draw to the store for other items and that it was an important way to

support local farmers and the community. Ranch Market also tries to buy from local vendors when possible.

## **9. Successful Models: Alternative Food Outlets**

In rural areas, traditional food retail may not be the only effective way to get fresh foods to people. Many other mechanisms can be explored, but two of which have had significant success are farmers' markets and buying clubs.

### **9.1 Farmers' Markets**

New Mexico now has over 50 farmers' markets, many of which are in rural areas. Farmers' markets provide access to the freshest produce, dairy and meat possible. Further, innovative programs like the WIC and Senior Farmers' Market Nutrition Programs provide access to these healthy foods for low-income seniors and families with children. Eight farmers' markets across the state are also able to accept payment with EBT cards, allowing food stamp recipients to spend their allotments on fresh, local produce.

Farmers' markets provide an important source of income for many small-scale farmers, ranchers and food processors that would otherwise have little or no market for their produce. Further, when farmers sell direct to consumers, they receive 100% of the food dollar, compared to 20% of the food dollar when produce is sold through conventional markets.

Farmers' markets require little initial capital outlay and ongoing operating costs. The biggest obstacle for markets in less-populated areas is often finding enough farmers willing to sell. Often local farmers will travel further to sell their produce at larger, urban markets to garner higher prices and larger sales volumes. However, innovative market managers have worked to help develop new farmers and to create incentives for experienced farmers to sell in hometown markets.

### **9.2 Buying Clubs**

Until recently, many rural New Mexicans were members of buying clubs. Formal or informal groups of families combined buying power to be able to get volume discounts and delivery. However, increased fuel costs have decreased distributors' willingness to serve these clubs whose combined purchases are still relatively small and often located in places off main delivery routes. Further, a few years ago, Shop Natural Grocers, one of the major distributors to buying clubs located in the Southwest, went out of business, leaving the clubs without a distributor. New infrastructure will need to be constructed to make buying clubs viable given high transportation costs. Further, because buying clubs generally only receive monthly deliveries, members must find alternative outlets for perishable products. A model that combines buying clubs with community supported agriculture should be explored.

### **9.3 Farm to School and On-Farm Storage Infrastructure**

For many years, Northern New Mexico fruit growers have sought a market for their fresh apples, peaches, plums and pears. With help from NMDA and the non-profit Farm to Table, they are finding it in the New Mexico Farm to School Program. Since the program's inception in 2004, Rio Arriba county fruit growers have seen rapid increases in sales to school districts. In 2007, fruit from Rio Arriba County going into eight school districts totaled \$100,000 in revenues. A number of other farmers from throughout the state are also selling to the schools through the DoD Fresh Program, the Commodities Program, after-school and summer programs, and other direct sales in 12 NM school districts. As a result, students who participate in school meal and snack programs (the vast majority of whom come from low-income families) now have access to the freshest, healthiest fruits and vegetables available.

To make this possible, NMDA and Farm to Table have helped to connect growers to school food service providers. They along with the NMSU Cooperative Extension Service (CES) have also provided important education to growers on food safety, production, and processing techniques. Further, with funding from the USDA, NMDA and CES arranged for the purchase and installation of two coolers which has allowed the fruit growers to improve their efficiency and sell their product throughout the winter.

For this program to continue to expand its ability to provide fresh fruits and vegetables to low-income children and a healthy market for New Mexico farmers, a stronger distribution system will need to be created to get produce from farms to schools.

## **10. Recommendations**

Based on the great need and opportunities for improved food access in rural and underserved urban communities in New Mexico, the NM Food Gap Task Force presents the following recommendations.

**1. Continue to Convene the Food Gap Task Force:** Given the complexity of the issue of food access, continued research and dialogue among stakeholders is necessary to ensure that the most effective policies are developed and implemented. The Task Force should be reconvened for a minimum of one year. Further, the membership should be expanded to include representation from more sectors, including food distribution, food retail, farming, and the Economic Development and Public Education Departments.

**2. Create Fund for Food Retail Pilot Projects:** Pennsylvania's Fresh Food Financing Initiative and the Tatum example show that investments of public dollars in food retail succeeds in increasing food access in underserved communities. The Task Force recommends that the state government create a \$100,000 fund, administered by the NM Department of Agriculture, to invest in a minimum of four pilot projects for food retail. Monies can be used to purchase equipment that would be leased to store owners, to pay for store renovations or to provide technical assistance. The Task Force or a similar entity would serve as an advisory board, developing criteria for the fund and providing advice on project selection.

**3. Create Fund for Food Distribution Pilot Projects:** Given the size of the state and its dispersed population, innovative distribution systems must be developed to ensure that rural stores are able to obtain perishable products at a reasonable price. The Task Force recommends that the state government create a \$100,000 fund, administered by the NM Department of Agriculture to invest in at minimum three distribution pilot projects. Monies can be used to purchase equipment that will be leased to the distribution entity or for research and development. The Task Force or a similar entity would serve as an advisory board, developing criteria for the fund and providing advice on project selection. The Task Force further recommends that distribution and retail projects be coordinated.

**4. Include Food Retail as an Eligible Economic Development Activity:** New Mexico provides a number of tax incentives, financing opportunities, workforce training and other services to private business for the sake of economic development. However, currently retail is excluded from most of these opportunities. Given the importance of access to fresh and healthy food and the capacity of independent food retail to circulate money in the local economy, the Task Force recommends that the legislature amend state statute to include food retail as an eligible economic development activity.

**5. Investigate Existing and Potential Incentives for Food Businesses:** Certain incentives may prove useful to encourage food businesses to locate in underserved areas. The Task Force recommends that it work with the Economic Development Department (EDD) and other departments to investigate how food businesses may utilize existing incentives and develop new ones. The Economic Development Department should be tasked with ongoing outreach to inform food businesses about these incentives. This could include development of educational materials that can be distributed to EDD community representatives, county and local economic development staff, NMSU Cooperative Extension agents, councils of governments and other local entities. Trainings for store owners in financing store improvements could also be offered in coordination with existing yearly WIC trainings.

**6. Coordination among Agencies on Food Programs:** as discussed above, a number of state agencies are involved in public food programs, including ALTSD, CYFD, HSD, DOH, NMDA, and PED. These agencies have already begun to work together on various issues. For example, HSD and DOH have been looking into the possibility of combining their benefits onto one card. PED and HSD are also investigating the possibility of making the families of children that receive free and reduced school lunch automatically eligible for food stamps. Representatives from various agencies also collaborate through their participation in public-private coalitions such as the Healthier Weight Council, the State Nutrition Action Committee, the Interagency Alliance for the Prevention of Obesity, and the New Mexico Food and Agriculture Policy Council. The Task Force recommends that these initiatives continue and that the agencies continue to expand collaboration, including:

- Increasing efficiency and decreasing cost of public food distribution through sharing of trucks and routes.
- Coordinated efforts by all food program agencies for full participation by eligible households in the food stamp program. For every five dollars spent on food using food stamps, \$9.20 in local economic activity is generated.

- Collaborative social marketing campaigns to promote fresh fruits and vegetables.
- DOH and HSD combine food stamp and WIC training for grocery store owners.
- Coordinate nutrition and health promotion outreach conducted in various departments.

**7. Investigate Federal Funding Opportunities:** as part of its continued work, the Food Gap Task Force should investigate and help the public and private entities in New Mexico to obtain funding from existing federal programs related to food retail and distribution. These programs include:

- Transportation funding for summer food programs (USDA-FNS)
- Intermediary Re-lending Program—for economic development in rural areas (USDA)
- Rural Business Opportunity Grants (USDA)
- Healthy Urban Food Enterprise Development Center—includes rural and Tribal communities (USDA-CSREES)
- Food Distribution Program on Indian Reservations (USDA-FNS)
- Public Works and Economic Development Program (EDA)
- Community Food and Nutrition Program—grants to help coordinate public and private food assistance programs (HHS)
- Community Development Block Grants (HUD)
- Rural Housing and Economic Development Program (HUD)
- New Markets Tax Credits (Department of the Treasury)
- Small Business Administration Guaranteed Loan Program and Technical Assistance
- Value-added Agricultural Market Development Program (USDA)
- Rural Business and Industries Loan and Loan Guarantee program—food enterprise set-aside (USDA)
- Rural Micro-Enterprise Assistance Program (USDA)
- Community Food Project Grant Program (USDA).

## **11. Conclusion**

While there are many factors that contribute to the health and wealth of New Mexico’s communities, the food environment and local food system play a key role. Our current food system presents both significant barriers to healthy food access and exciting opportunities. While we have high levels of food insecurity and diet-related diseases, we also have a strong agricultural base, innovative and community-minded entrepreneurs, and committed public and non-profit sectors. If the efforts of these food system stakeholders are coordinated, there is great potential to create a vital local food system. The recommendations above provide an opportunity for the State Government to jumpstart this initiative.

## **Appendix A: Acknowledgements**

The Task Force would like to thank Governor Richardson and the New Mexico State Legislature for recognizing the importance of food security and taking this important step to improve food access for all New Mexicans. The Task Force is also very grateful for the skillful and dedicated work of Representative Moore who led us through this process. We would also like to express our gratitude to the many stakeholders and experts who offered their wisdom and knowledge to us, including Steve Warshawer, Steve Whitman, and Donna Grein among many others. Finally, we would like to thank Bernalillo Cooperative Extension and the Santa Fe Business Incubator for allowing us to use their facilities and the many local farmers whose food sustained us during meetings.

## **Appendix B: List of New Mexico Food Gap Task Force Members**

### ***Convening Department Secretary:***

Dr. Miley Gonzales, New Mexico Department of Agriculture

### ***Chair of Task Force:***

Representative Brian K. Moore, District 67  
Grocery Store Owner, Clayton, NM

### ***Task Force Members:***

Kari Bachman	Program Coordinator NMSU Cooperative Extension, Home Economics
Elizabeth Byers	State Nutritionist Aging & Longterm Services Department
Clark de Schweinitz	Chair New Mexico Food and Agriculture Policy Council
Craig Mapel	Marketing Specialist NM Department of Agriculture
Gerard Martinez	Director of Community Services NM Dept of Transportation
Mary Oleske	Bureau Chief HSD Food & Nutrition Service Bureau
Pam Roy	Co-Director Farm to Table
Ann Simon	Economic Development Planner Mid Region Council of Governments
Christina Stick	Policy Analyst NM Dept of Indian Affairs
Deanna Torres	Deputy Director NMDOH Women Infant Children Program

## **Appendix C: House Joint Memorial 10**

### A JOINT MEMORIAL

REQUESTING THE CREATION OF A FOOD GAP TASK FORCE TO  
INVESTIGATE WAYS TO IMPROVE ACCESS OF RURAL AND UNDERSERVED  
NEW MEXICANS TO SOURCES OF HEALTHY AND AFFORDABLE FOODS.

WHEREAS, more than six hundred forty-seven thousand people, one-third of New Mexico's population, live in rural areas; and

WHEREAS, nineteen of New Mexico's thirty-three counties are considered to have high or persistently high poverty rates; and

WHEREAS, New Mexico is ranked first in the nation in food insecurity and third in hunger; and

WHEREAS, low-income New Mexico families spend as much as twenty-six percent of their annual income on food, a proportion that is double that of the national average; and

WHEREAS, on average, New Mexicans living in rural communities pay eighty-five dollars (\$85.00) for a bag of groceries, compared to urban dwellers who pay fifty-five dollars (\$55.00) for the same bag of groceries; and

WHEREAS, many of New Mexico's rural residents must travel thirty to seventy miles to shop at a grocery store; and

WHEREAS, health problems caused by poor nutrition, including obesity and diabetes, cost New Mexico three hundred twenty-four million dollars (\$324,000,000) annually; and

WHEREAS, those health problems can be remedied with improved nutrition through adequate access to healthy, affordable and culturally appropriate food; and

WHEREAS, evidence suggests that many New Mexicans, especially those living in rural areas, do not have adequate access to healthy, affordable and culturally appropriate foods because they lack access to grocery stores and transportation; and

WHEREAS, research shows that people who do not have adequate access to healthy, affordable and culturally appropriate foods are likely to have diet and health problems and to experience forms of food insecurity; and

WHEREAS, it is the policy of the state of New Mexico that all New Mexicans have adequate access to healthy, affordable and culturally appropriate foods; NOW, THEREFORE,

BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF NEW MEXICO that the governor be requested to appoint a food gap task force, whose members shall include representatives from the New Mexico food and agriculture policy council, the New Mexico task force to end hunger, the New Mexico department of agriculture, the economic development department, the department of health, the

human services department, the aging and long-term services department, the Indian affairs department, the department of transportation, regional councils of government, the grocery industry and agricultural not-for-profit organizations; and

BE IT FURTHER RESOLVED that the governor be requested to designate the New Mexico department of agriculture to provide administrative support to the food gap task force and that the task force prepare a report to the governor and legislature that provides information about the nature and scope of the barriers that exist between New Mexicans and adequate access to healthy, affordable and culturally appropriate foods and that presents recommendations, options and steps that the public and private sectors can use to improve access to healthy, affordable and culturally appropriate foods in NewMexico; and

BE IT FURTHER RESOLVED that the food gap task force be requested to investigate economic incentives and finance options that the state could provide to assist grocery storeowners; methods of improving transportation and distribution services; potential partnerships between the state and private for-profit and not-for-profit entities; and ways to improve coordination among existing food programs, health initiatives and rural economic development programs to rebuild the infrastructure of New Mexico's food and farming systems; and that the task force develop an action plan that may include pilot projects; and

BE IT FURTHER RESOLVED that the food gap task force present its report to the governor and to the appropriate interim legislative committees by October 30, 2007; and

BE IT FURTHER RESOLVED that copies of this memorial be transmitted to the governor, the director of the New Mexico department of agriculture, the secretary of economic development, the secretary of health, the secretary of human services, the secretary of aging and long-term services, the secretary of Indian affairs and the secretary of transportation.

---

## **Appendix D: Endnotes**

- i Morton, Lois W. and Blanchard, Troy C. “Starved for Access: Life in Rural America’s Food Deserts.” *Rural Realities*. 2007. Volume 1, Issue 4. Rural Sociological Society. <http://www.ruralsociology.org/pubs/RuralRealities/Issue4.html>. Accessed 10 October 2008.
- ii Drewnowski, Adam, and Monsivais, Pablo. *Journal of the American Dietetic Association*, Volume 107, Issue 12, Pages 2071- 2076, December 2007.
- iii Bureau of Labor Statistics. Consumer Price Index. [www.bls.gov/cpi](http://www.bls.gov/cpi). Accessed 5 September 2008.
- iv According to the 2000 US Decennial Census. Accessed at [www.census.gov](http://www.census.gov), 10 October 2008.
- v Moore, et al. “Associations of the Local Food Environment with Diet Quality—A Comparison of Assessments based on Surveys and Geographic Information Systems.” *American Journal of Epidemiology*. February 27, 2008.
- vi Babey, et al. April 2008. Designed for Disease The Link Between Local Food Environments and Obesity and Diabetes. UCLA Center for Health Policy Research. [www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=250](http://www.healthpolicy.ucla.edu/pubs/publication.asp?pubID=250)
- vii Morton, Lois W. and Blanchard, Troy C. “Starved for Access: Life in Rural America’s Food Deserts.” *Rural Realities*. 2007. Volume 1, Issue 4. Rural Sociological Society. <http://www.ruralsociology.org/pubs/RuralRealities/Issue4.html>. Accessed 10 October 2008.p.6
- viii NMSU Cooperative Extension. <http://ehe.nmsu.edu/diabetes.html>, Accessed 18 October 2008.
- ix New Mexico Department of Health, Diabetes Prevention and Control Program. “Cost of Diabetes in New Mexico.” [http://www.diabetesnm.org/pdf/annual\\_costs.pdf](http://www.diabetesnm.org/pdf/annual_costs.pdf). Accessed 10 October 2008.
- x Jaaoko, et al. “Prevention of Type 2 Diabetes Mellitus by Changes in Lifestyle among Subjects with Impaired Glucose Tolerance.” *New England Journal of Medicine*. 344 (2001) 18:1343-1350.
- xi Frazao, et al. “Food Spending Patterns of Low-Income Households.” September 2007. USDA Economic Research Service. <http://www.ers.usda.gov/publications/eib29/eib29-4/eib29-4.pdf>. Accessed 8 October 2008.
- xii Mark Winne, interview with Tim Campos for article to be published in *Edible Santa Fe*, owner Santa Rosa Grocery Store. October ??, 2008.
- xiii Staff Writer. “Tatum gets money for grocery equipment.” *Hobbs News-Sun*. 2006. <http://www.hobbsnews.com/?p=206>. Accessed 17 October 2008.

## **Other Sources Consulted**

New Mexico Food and Agriculture Policy Council. *Closing New Mexico’s Rural Food Gap*. 2006. [http://www.farmtotablenm.org/closing\\_nm\\_food\\_gap\\_fulldoc.pdf](http://www.farmtotablenm.org/closing_nm_food_gap_fulldoc.pdf)