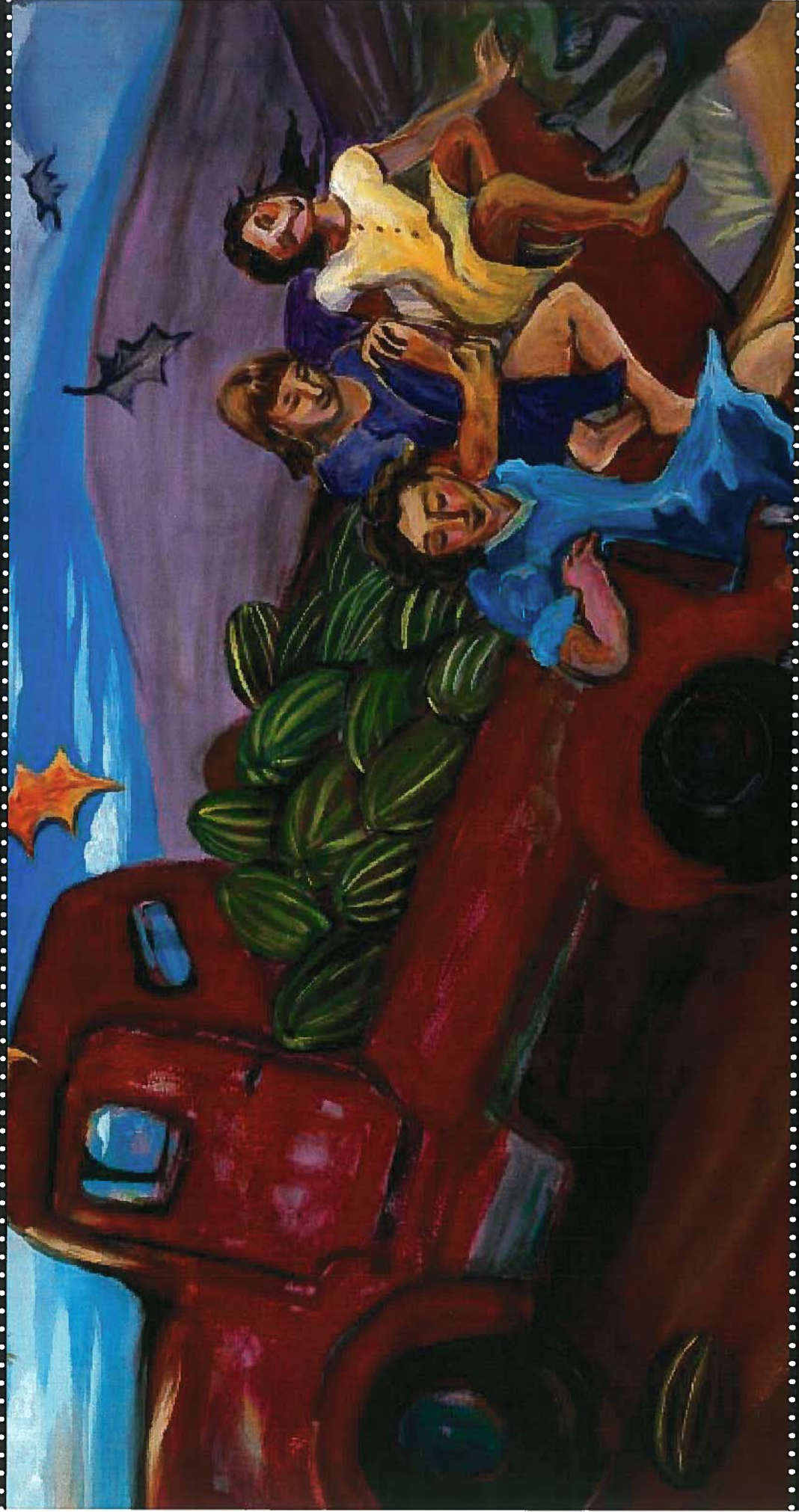


CENTRAL TEXAS FOODSHED ASSESSEMENT



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A report by Karen Banks for Sustainable Food Center

Credits

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Executive Summary

Central Texas is one of the fastest growing regions in the nation. As the population continues to grow, so too does the rate of food insecurity. The rising cost of living in the Austin-Round Rock area is forcing some residents to choose between purchasing food for their family or paying the rent. Increased development beyond the city limits is consuming valuable farmland, hindering the capacity of area farmers to meet the food needs of the community. The Central Texas Foodshed Assessment utilized a mixture of participatory research techniques to conduct an examination of the production capacity and the provision of healthy food to meet the dietary needs of low-income residents. This study relied on best practices from previous assessments in order to facilitate meaningful interactions with community members and stakeholders.

This study focused on the state of agriculture for small to medium-sized farmers in Bastrop, Caldwell, Hays, Travis, and Williamson counties whose primary customer base is the Austin metropolitan area. These farmers rely on urban markets for the distribution and sale of their products creating a unique and precarious relationship between the urban landscape and surrounding rural communities. While the region boasts a burgeoning support network for local food, agriculture in this area suffers from a national obsession with cheap food, and detrimental regional climate patterns. Overcoming these barriers means exploring options for a 'buy local' campaign and water conservation districts for agriculture.

While local food is not priority for low-income residents in Austin - the main market for area farms - when buying groceries, access to healthy, quality food is important. The desire for quality food drives families to shop outside of their neighborhoods, at stores with a wider selection, better produce, and cleaner facilities. The cost of food though drives most of the shopping decisions at the store therefore, families seek ways to increase their consumption of healthy foods: coupons, price comparison, shopping in season, and eating at home. Improved store quality in low-income neighborhoods, access to and education about alternative markets for healthy produce, and the availability of a diverse variety of ingredients at all food retail environments would help to meet the dietary needs of residents in Austin.

Food production and food access are key components of a food system. The interactions with producers and consumers for this assessment helped to generate innovative ideas for strengthening the local food system, improving the state of agriculture for local farmers, and improving food equity in Central Texas.

Sustainable Food Policy Board

The Sustainable Food Policy Board is a 13 member advisory body to the Austin City Council and the Travis County Commissioners' Court concerning the need to improve the availability of safe, nutritious, locally, and sustainably-grown food at reasonable prices for all residents, particularly those in need, by coordinating the relevant activities of city government, as well as non-profit organizations, and food and farming businesses. The Board was approved in 2008 at the behest of City Council members Mike Martinez, Lee Leffingwell and Laura Morrison, as well as Travis County Commissioners Sarah Eckhardt and Ron Davis with prompting from Sustainable Food Center and Edible Austin.

Board Charges:

1. Monitor the availability, price and quality of food throughout the Austin and Travis County area;
2. Collect data on the food security and the nutritional status of city residents;
3. Inform city and county policy makers, administrators, and the public at large about the status of the region's food system and food security;
4. Monitor and analyze the administration of city and county food and nutrition programs;
5. Explore new means for the city and county to improve the local food economy, the availability, sustainability, accessibility, and quality of food and our environment, and assist city and county departments in the coordination of their efforts;
6. Review availability and recommend measures to promote the preservation of agricultural land in the City of Austin and Travis County;
7. Recommend to the city and county adoption of measures that will improve existing local food production and add new programs, incentives, projects, regulations, or services.

Central Texas Foodshed Assessment

The Central Texas Foodshed Assessment will provide a comprehensive examination of the production capacity, distribution infrastructure, and availability of healthy food in Travis, Williams, Bastrop, Hays and Caldwell counties. The basis of this project is conversations with fruit, vegetable and livestock farmers about the state of agriculture and opportunities for local growers in the region; and conversations with residents of underserved areas about barriers in access to healthy food. Recommendations on how to build a just and sustainable local food system are based on these conversations. The Central Texas Foodshed Assessment is supported by the USDA Community Food Projects, BlueCross BlueShield of Texas, the Stillwater Foundation and Sustainable Food Center.

Project Goals:

1. Appropriately address disparities in access to culturally appropriate, healthy food.
2. Create opportunities for regional farmers and food entrepreneurs which also increase food equity within our regional food system.
3. Estimate the capacity of the region to meet the food needs of its inhabitants.
4. Foster new connections between food-focused organizations to ensure that our local food system is holistic and effective.
5. Ensure the implementation of meaningful, comprehensive policies to support a healthy, viable, and sustainable Central Texas foodshed.

Introduction

In 1995, Sustainable Food Center published an influential report, *Access Denied*, that exposed inequalities in access, availability and the quality of food for residents of east Austin. The report focused on the area between Manor Rd., the Colorado River, IH-35, and Airport Blvd. At the time, this area was home to a high concentration of low-income and Hispanic residents. Findings from the report are based on interviews with residents, surveys of area grocery and convenience stores, and an analysis of available food resources. The report concluded that “the food system of East Austin reflects the characteristics of a community in which access to nutritious, affordable food is difficult for many residents (Sustainable Food Center, 1995).” From these findings arose a bus route connecting residents to nearby grocery stores, and increased interest in alternative food programs, like farmers’ markets and community gardens. The Central Texas Foodshed Assessment builds on this report to provide updated and enhanced information on disparities in food access in Austin.

The Central Texas Foodshed Assessment evaluates the capacity of the Central Texas region to meet the food needs -- access to affordable, culturally-appropriate, quality, healthy foods -- of its inhabitants. This evaluation is based on an examination of two critical elements of the local food system: production and consumption. This study aims to better understand the production capacity of farms located within a five county region surrounding the state capital of Austin. Additionally, it aims to identify barriers that inhibit

access by residents of the capital city -- home to the largest population in the region -- to healthy foods. By focusing on these two ends of the food system, this study hopes to begin to fill in holes in the local food system.

Food Access

Texas is one of the top three states, behind Mississippi and Arkansas, with a rate of food insecurity higher than the national rate. From 2007-2009, 17.4% of residents in Texas suffered from low or very low food insecurity, compared to 14.7% nationally (USDA). Food assistance receives the second most requests from clients calling Texas 2-1-1, the free, state resource assistance hotline. The price tag for food insecurity in Texas is estimated to be over \$9 billion a year, due largely to treatment of preventable diet-related illnesses and lowered employee productivity (Hagert, 2007).

Central Texas is no exception. According to a report by Feeding America and the Capital Area Food Bank (CAFB), between 200,900 to 368,800 people seek food from the CAFB annually. On a weekly basis, the CAFB and its 350 partner agencies provide food to between 41,000 to 54,900 people in 21 counties (Mabli, 2010). Of those households receiving services from CAFB, only 24.5% are employed, 78.3% have incomes below 130% of the federal poverty level, 80% are food insecure, and only 26% receive Supplemental Nutrition Assistance Program (SNAP) benefits (Mabli, 2010).

In Travis County, requests for food assistance are rising.

Introduction

**Supplemental Nutrition Assistance Program Cases
Travis County, TX, 2007-2010**

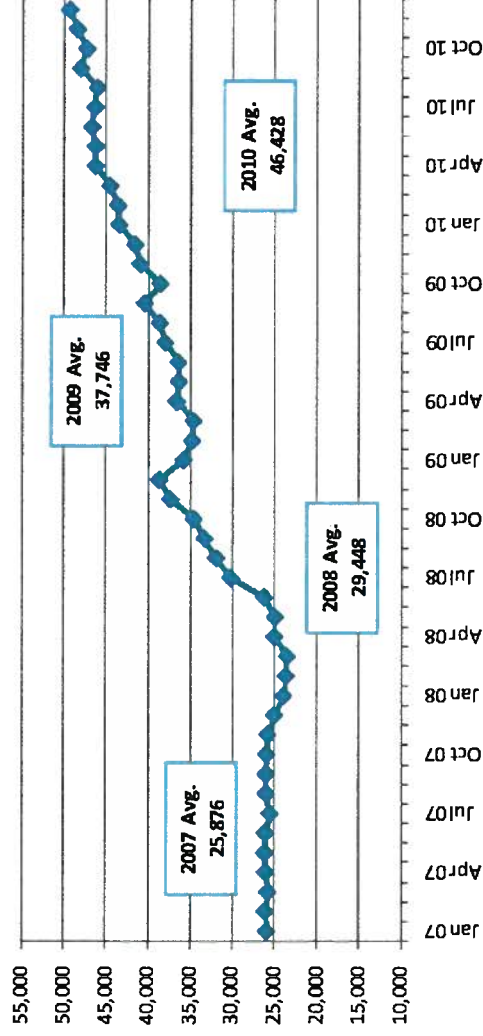


Table 1: Supplemental Nutrition Assistance Program Cases, Travis County, 2007-2010 (Travis County, 2010)

Calls to 2-1-1 for food assistance increased by 8% in 2009 (Travis County, 2011). According to Travis County Health and Human Services, since 2007 enrollment in SNAP has steadily increased. At the end of 2010, 11% of Travis County residents were enrolled in SNAP (Travis County, 2011). This number could be higher. Over half (53%) of Travis County residents eligible for SNAP do not taking advantage of the benefits (Texas Food Bank Network, 2009). Of those residents who receive services from the CAFB and are eligible for SNAP but are not enrolled, 44% have low food insecurity and 43.2% have very low food insecurity (Mabli, 2010).

Under-enrollment is causing a loss of over \$157 million in revenue in SNAP benefits and over \$281 million in economic activity for the state (Texas Food Bank Network, 2009).

The steady increase in requests for food assistance indicates that families in Travis County are trying to stave off food insecurity because of changing demands on household incomes. The rise in demand for government assistance is likely attributable to economic pressures. In 2008, the consumer price index for food increased by 6.4% over the previous year, with minimal change in 2009 and 2010 (Leibtag, 2011). The USDA predicts that the cost of food will increase by another 3-4% in 2011 (Leibtag, 2011).

Another financial hardship facing Travis County residents is rapid population growth and subsequent increase in taxable household values. According to the US Census Bureau, the Austin-Round Rock MSA was one of the fastest growing metro areas in 2009, with a 3.8% increase in population (US Census Bureau, 2009). In certain areas of Austin, especially east Austin, this growth has significantly impacted property values. From 2000-2005, residents in the 78617, 78653, and 78702 zip codes saw a 100% increase in the taxable value of their single-family homes. Residents of the 78721 zip code saw the taxable value of their single-family homes increase by as much as 80% (Frank and Robinson, 2005). With limited mechanisms available to help low-income families alleviate the financial burden caused by a rise in property taxes, residents

Introduction

may seek assistance to help cover other household expenses. For whichever reason, more families are seeking financial assistance to meet their household expenses, including their food needs.

Food Production

In Texas, cotton, cattle, and hay dominate the agriculture industry and land. In Central Texas, the majority of land is used for the production of hay, corn and cattle (or poultry in Caldwell County). In Bastrop, Caldwell, Hays and Williamson counties, over half of the land is either crop or pastureland, the primary use being pasture. Williamson County has the greatest proportion of agricultural land while urban development is the dominate land use in Travis County. Of the 2.7 million acres that comprise these five counties, 492,459 acres (18%) is devoted to cropland. Less than one percent (.02%) is used to grow produce. Fruit and vegetable production is so nominal that it does not register with the Census of Agriculture.

Agricultural land in Texas is in jeopardy due to development pressures. Since 1997, over 40% of farm and ranch land in 25 counties in Texas has been converted to uses other than agriculture (Texas Trends, 2009). In Bastrop, Caldwell, Hays, Travis and Williamson counties, the number of acres devoted to cropland declined by 36%, with Bastrop and Hays counties losing 47% and 49% of cropland. Seemingly contrary to the loss of farmland is the rise in the number of farms in Central Texas. Since 1992, the number of farms in Bastrop, Caldwell, Hays, Travis and Williamson counties

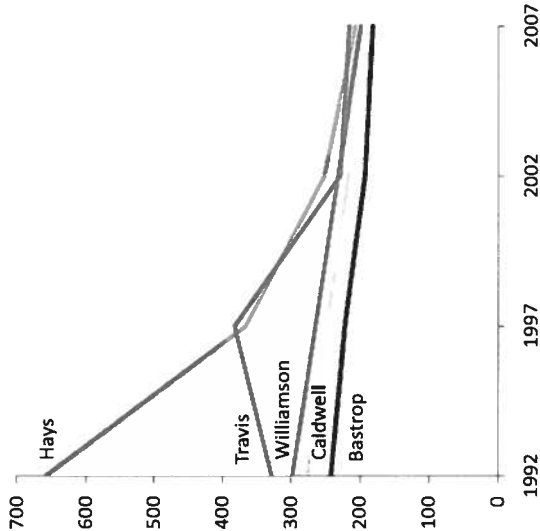


Table 2: Change in average farm acreage from 1992-2007 (USDA Census of Agriculture, 2007).



Table 3: Change in number of farms from 1992-2007 (USDA Census of Agriculture, 2007).

Introduction

has increased by 41%, however, the average farm size has declined by between 22-68%. On the rise as well though is the market value of farmland, which has increased by between 110-196% since 1992. In this five county area, the Austin-Round Rock MSA was deemed one of the fastest growing metro areas in 2009 with a 3.8% increase in population. Additionally, Williamson and Hays counties were ranked sixth and tenth among the fastest growing counties in the nation (US Census, 2009). Fragmentation of farmland due to development reduces the ability of local farms to meet the food needs of nearby communities.

Farms at the fringe of urban centers, in the peri-urban area, play an important role in meeting the food needs of proximate consumers but they also maintain a precarious relationship with the city. "The peri-urban interface is characterized by strong urban influences, easy access to markets, services and other inputs, ready supplies of labor, but relative shortages of land and risks from pollution and urban growth (McGregor, 2006)." Access to urban markets offers economic opportunities for peri-urban farms yet also leaves them subject to inflated land values and utility costs (Grigg, 1995). Urban sprawl can reduce farm size and production capacity. Inflated land values can lead to under and over utilization of farmland (Grigg, 1995). Farmers may cease to maintain their crop land because selling the land will garner a higher profit. Conversely, fields may be farmed too intensely in hopes of a large profit from a final harvest. Additionally, farms in the peri-urban area face a shortage of labor (Grigg, 1995).

While the city is a source of labor, it is also a drain on the labor pool since workers are drawn to the city in search of better paying jobs. The fragility of farms in the peri-urban area poses a challenge for urban agriculture to continue to contribute to the food needs of area residents.

Production

Assessment Goal:

Develop a model for estimating the regional production capacity of the Austin-Round Rock MSA to meet the food needs of area inhabitants.

Assessment Objectives:

Create an inventory of existing agricultural land based on the acreage under cultivation, potential capacity, production type, and crop specialty of area farms, and community gardens.

Identify deficiencies in the area's ability to meet survey-identified per capita consumption and the average USDA recommended daily allowance for a healthy diet based on regional crop production estimates.

Engage area farmers in participatory meetings to ascertain an account of the issues affecting regional farm stability, including water, labor, cost of living, inputs, regulatory barriers, and distribution infrastructure.

Assessment Goal:

Identify new and profitable opportunities for regional farmers and food entrepreneurs which also increase food equity.

Assessment Objectives:

Collect input from area farmers on barriers to and opportunities for business expansion, economic development and job training, especially for nascent farmers.

Mapping Central Texas Foodshed

While the production amounts for specific fruits and vegetables are not enough to be counted by the USDA Census of Agriculture, Central Texas does have a growing network of local farms, farmers' markets, farm stands, Community Supported Agriculture (CSAs), and community gardens specializing in growing fruits and vegetable. According to the USDA Census of Agriculture, in 2007, there were 77 registered farms, under 250 acres in Central Texas growing fruits and vegetables for sale on 416 acres. There were also 48 registered CSAs.

From 2009-2010, information on local agriculture resources in Bastrop, Caldwell, Hays, Travis and Williamson counties was collected from non-profit agencies, through conversations with stakeholders, and supplemented by online research.

Community garden information was provided by Sustainable Food Center, the Coalition of Austin Community Gardens, and Williamson County Health and Human Services.

Farm, farmers' market and farm stand information was provided by Sustainable Food Center, Edible Austin, Texas Department of Agriculture, Cedar Park Farmers' Market, Barton Creek Farmers' Market, Georgetown Farmers' Market Associations, the River Valley Farmers' Market network and the San Marcos/New Braunfels Farmers' Market Association. Information about acreage and product specialization was not available for all farms.

Production

Product	Number of Farms	% of Farms
Vegetables	93	48%
Cattle (meat)	20	10%
Fruit	17	9%
Chickens	14	7%
Eggs	10	5%
Pecans	9	5%
Goat Dairy	4	2%
Honey	4	2%
Dairy	3	2%
Lamb	3	2%
Mixed livestock	3	2%
Pork	3	2%
Bison	2	1%
Fish	2	1%
Herbs	2	1%
Quail	2	1%
Goat	1	1%
Mushrooms	1	1%
Olives	1	1%
Wild Game	1	1%

Table 4: Number of farms that specialize in the cultivation of a specific agricultural product. Data collected from 2009-2010.

This information reveals a network of 202 farms within 47 counties who primarily rely on the urban markets in Bastrop, Caldwell, Hays, Travis and Williamson counties for their customer base. The majority of these farms are under 100 acres, with the largest being 13,000 acres. Together, they occupy over 88,000 acres of land. The smaller farms specialize primarily in vegetable production while the larger farms raise cattle and other livestock. The farms in Grayson and Hildalgo counties are the farthest away, up to 250 miles. These farms specialize in citrus -- a crop not easily cultivated in Central Texas -- and livestock -- a product that requires a lot of land. Within the five county region, there are 114 farms that occupy over 9,400 acres. The majority of these farms grow vegetables. These farms are by no means the total number of agricultural producers in the region however, the primary market for their products is the Austin metropolitan area.

Within the five county region, there are 29 farmers' markets: six (6) summer neighborhood farm stands that alternate locations annually; and 15 year-round markets. There are two farmers' markets in Hays County, six in Bastrop County and five in Williamson County. There are no farmers' markets in Caldwell County.

In addition to farmers' markets, the five county region is home to three farm delivery services -- Farm to Table, Farmhouse Delivery, and Greenling

-- and one farm to institution program -- Sustainable Food Center's Farm Direct program -- that provide residents, restaurants and institutions with local produce. There is also a burgeoning cooperative movement amongst local farmers to connect local growers with local restaurants -- Growers Alliance of Central Texas.

There are 28 community gardens in the five counties. The majority are located within the Austin city limits. There is only one community garden in Hays County and no community gardens in Caldwell County.

Production

Urban Agriculture Resources

Travis County

Accessible Vegetables is a simple movement of growing gardens in accessible areas, like front yards and allowing individuals to come and harvest enough for a meal.
accessiblevegetables.blogspot.com

Austin Parks and Recreation Dept (PARC) is working to grow urban agriculture in Austin. In February 2011, Austin City Council approved the creation of an Urban Agriculture Coordinator position and adopted three (3) ordinances to ease the process for City-supported community gardens.
ci.austin.tx.us/parks/communitygardens.htm

Coalition of Austin Community Gardens works to actively support and promote the stability and propagation of community gardens in Austin.
communitygardensaustin.org

Edible Austin is an independent, quarterly publication dedicated to the promotion of the local food culture and economy in Central Texas.
edibleaustin.com

Five Mile Farm is a pilot project of Resolution Gardens, with support from Wheatville Coop, to create a decentralized urban farm that lives in homeowner's yards.
resolutiongardens.org/farm

Garza Gardens is run by the horticulture class at Garza High School which grows herbs and vegetables to sell at the local farmers' markets.
austinschools.org/campus/garza/html/activities/multicredit_classes/Horticulture%20website/Garza%27s%20Gardens%20Website/index.html

Genesis Gardens (formerly Karpophoreo Project) cultivates a diverse community of healthy and empowered individuals through the creation and management of backyard farms and micro enterprises.
kprojectmlf.wordpress.com

Green Corn Project helps elderly, low-income, and disabled community members grow their own food by installing gardens in homes, community centers and elementary schools in underserved areas of Austin.
greencornproject.org/gc

Growers Alliance of Central Texas strengthens ties between growers in an effort to build a brand of cooperatively marketed high-quality products, and provides mentoring opportunities for new farmers in an effort to increase confidence in the local food system.
gro-act.com

New Farm Institute educates, assists and inspires a new generation of sustainable farmers, with a focus on the urban fringe, an area within 30 miles of the city center. The Institute also explores emerging markets for new farmers, particularly in the field of public health.
greengatefarms.net/new-farm-institute

Slow Money Austin is committed to developing and promoting essential capital resources for environmentally, socially and culturally sustainable food enterprises serving Central Texas.
slowmoneyaustin.org

Sustainable Food Center's Grow Local Program provides resources and education for children and adults to develop skills in food production and organic gardening. The program specializes in food production and education at schools and in community gardens.
sustainablefoodcenter.org/grow-local

Sustainable Food Center's Farm Direct Program brings locally-grown produce into the city and into locations accessible to low-income residents by organizing weekly farmers' markets, and farm direct deliveries to institutions, adding to the market opportunities for local farmers.
sustainablefoodcenter.org/farm-direct

Urban Patchwork Neighborhood Farms help neighbors in small communities turn unused yard space into farmland for growing fresh, organic produce for their community.
urbanpatchwork.org

Production

Urban Roots (a project of YouthLaunch) is a youth development, hunger relief, social entrepreneurship, and education program for youth aged 14-18 in East Austin. The program provides employment, life skills, and service opportunities on a 3-acre farm, where youth grow food for those in need in their community.

youthlaunch.org/programs/urbanroots.php

Bastrop County

A Row to Share is a group of Elginites who donate home-grown, fresh produce from their gardens to the Elgin Community Cupboard, a local emergency food provider.

arowtoSHARE.wordpress.com

Hays County

GROW! San Marcos is a group of gardeners and locally sustainable agricultural activists bent on increasing the amount of gardens in San Marcos. They accomplish this through hands-on education, creating a garden network, workshops and sharing resources.

sanmarcoscommunitygarden.wikispaces.com/grow_sm

Williamson County

Williamson County Community Garden and Nutrition Program (WCCG) is a division of the Williamson County & Cities Health District's Women, Infants and Children (WIC) Program that supports active and healthy lifestyles, encourages social interactions and helps beautify the county. WCCG is responsible for the Heritage Community Garden in Georgetown and the Taylor Community Garden.

wccgd.org/Services/WIC/Nutrition/Gardening.htm

Neighborhood Garden Project promote healthy local food and sustainable living through education and community gardening in Round Rock. The project opened Unity Park Community Garden in 2010.

rrcommunitygardens.ning.com

Texas

AgriLife Extension works to improve the lives of people, businesses, and communities across Texas and beyond through high-quality, relevant agricultural education.

texasextension.tamu.edu/

Travis County	travis-tx.tamu.edu
Williamson County	williamson-tx.tamu.edu
Bastrop County	bastrop-tx.tamu.edu
Caldwell County	caldwell-tx.tamu.edu
Hays County	hays-tx.tamu.edu

Farm and Ranch Freedom Alliance advocates for farmers, ranchers, and homesteaders through public education and lobbying to assure independence in the production and marketing of food, and the prevention of unnecessary regulations.

farmandranchfreedom.org

Texas Organic Farmers and Gardeners Association is an association of ranchers, farmers, commercial plant growers, retailers, wholesalers, processors, distributors, and consumers who strive to promote organic agriculture as a sustainable systems approach in the production of food and fiber.

tofga.org

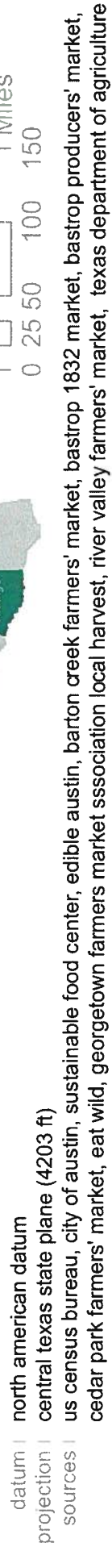
Texas Organic Farming Research Center, Inc. is a non-profit corporation aimed at encouraging farmers, ranchers, and those who love the land to join in an effort to document demonstrated organic practices.

txorganics.org

Texas Department of Agriculture is a diversified state agency that provides a value-added service through marketing and regulatory services in order to make Texas the nation's leader in agriculture.

www.agr.state.tx.us

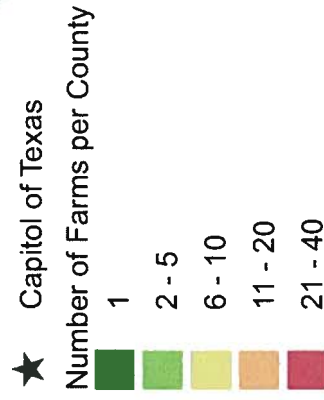
This map shows the distance from Travis County of farms by county whose primary market is the Austin urban area.



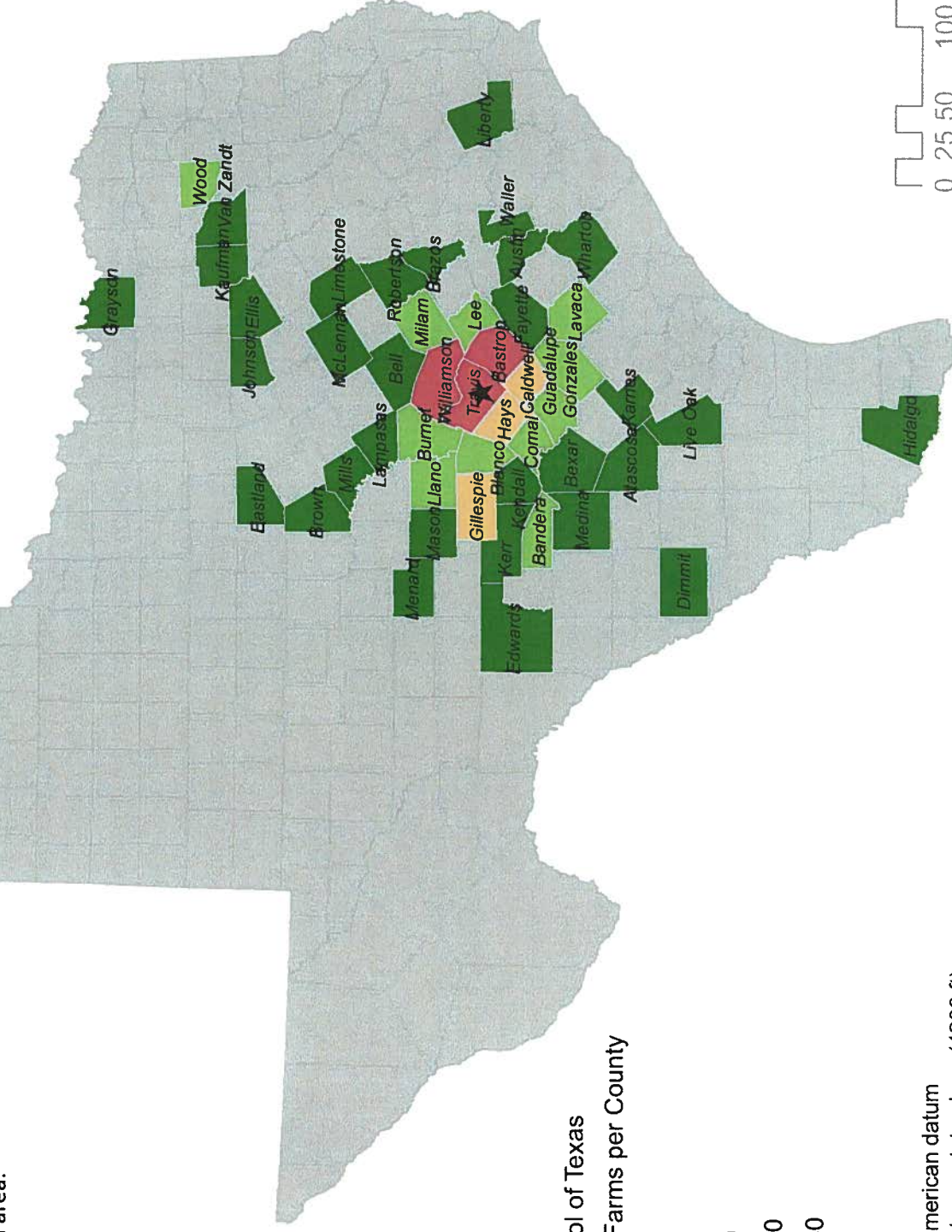
Travis County Foodshed

Farms per County

This map shows the number of farms by county whose primary market is the Austin urban area.



datum | north american datum
projection | central texas state plane (4203 ft)
sources | us census bureau, city of austin, sustainable food center, edible austin, barton creek farmers' market, bastrop 1832 market, bastrop producers' market, cedar park farmers' market, eat wild, georgetown farmers market association local harvest, river valley farmers' market, texas dept. of agriculture



Production

Methodology

From February – October 2010, five (5) discussions were held with farmers from either Bastrop, Caldwell, Hays, Travis or Williamson counties. Farmers were asked to talk about the state of agriculture in Central Texas: what is working, what is not working, and solutions to the problems.

Locations:

- Texas Organic Farmers and Gardeners Association Conference in San Marcos
- Norwood Towers in downtown Austin
- Austin Community College Cedar Park Campus
- Dripping Springs City Hall
- First National Bank Community Center in Elgin

In January 2011, a 30-question internet survey was emailed to farmers via farmers' market managers, individual farmers and non-profit agencies. The survey addressed issues related to production practices, farm income, employment, information sources, distribution systems, challenges and suggested solutions.

Participation

Twenty-one farmers and city officials participated in the discussions. By far, the largest turnout of all of the discussions was the meeting in Elgin for Bastrop County. Eleven farmers and 2 city officials attended this discussion. Only one farmer attended each of the discussions at the Texas Organic Farmers and Gardeners Association Conference in San Marcos, the Austin Community College Cedar Park Campus, and Dripping Springs City Hall. Even with extensive outreach through

area farmers' markets and other community groups, overall attendance at the discussions was low. This could be due to the time of year or time of day, lack of understanding about the purpose of the roundtables, lack of interest, or simply a lack of time.

Given the low turnout for the discussions, a survey was sent to farmers to gather more information about the state of agriculture in Central Texas. The hope was that a survey would be more accessible since farmers could fill it out at their leisure. Only 13 farmers completed the survey. Seven responses came from farmers in Travis County while one response each came from farmers in Burnet, Caldwell, Comal, Hays, Lee and Mills counties. The average farm size is 62.25 acres, ranging in size from 1 acre to 200 acres. Eleven respondents farm year-round while two are seasonal farmers. Seven of the farms are certified organic, four use organic practices but are not certified, one practices sustainable methods, and one uses conventional techniques. All of the farmers, except for one grow fruits and vegetables. One raises poultry and cattle. The number of years farming ranged from 2 to 50. Six respondents have been farming for over 20 years. The low completion rate may be due to the length of the survey, distribution method, survey format -- internet only -- or lack of understanding about the purpose of the survey.

It is difficult to generalize about the state of agriculture in Central Texas based on the low participation rate. This report, therefore provides a limited, introductory picture of issues potentially facing farmers in Central Texas.

Production

Major Themes

What is working for agriculture in Central Texas?

- Support from local schools
- Support from local governments
- Cooperative, knowledgeable network of farmers
- Year-round growing season
- Increasing awareness of local, sustainable, organic agriculture

What is not working for agriculture in Central Texas?

- Culture of cheap food
- Unfriendly policies toward alternative farm practices
- Lack of knowledge about good nutrition
- Weather
- Access and availability of water
- Financial support for education, public awareness, research, labor and investment capital
- Tax exemptions for small farms
- Access to affordable land
- Disconnect between new and existing farmers
- Lack of transparency

Where do we go from here?

- Education about local agriculture, particularly in schools, and on how to cook and grow local food.
- Explore options for ground water conservation districts and engage more in water policy issues.
- Cultivate more funding providers for farmers.
- Strengthen communication between farmers, especially new and existing farmers.

Findings

Central Texas is home to a robust network of small, urban farms that grow everything from vegetables to pecans, mushrooms to lamb. The success of these farms depends on access to supportive urban markets in Bastrop, Hays, Travis and Williamson counties. Their livelihood is also contingent upon regulations governing water, land use and agricultural practices. Of primary concern for farmers who participated in the discussion and responded to the survey is a pervasive national culture of cheap food, the availability of water and burdensome regulations that restrict farm practices. While participants acknowledged that there is growing government and consumer support for local agriculture, these efforts are in their infancy. Without broader efforts, these concerns pose challenges for the sustainability of the region as well as for the proliferation of profitable markets for local agriculture.

Underlying the regulatory, cultural and hydrographic issues, farmers also voiced concerns related to the lack of cooperative and coordinated purchasing and distribution systems as well as limited financial supports for small farmers, the dearth of affordable farmland and few formal resources for connecting experienced farmers with individuals interested in pursuing agrarian lifestyle. While not fully resolved, these issues are being addressed through burgeoning efforts by area organizations. Texas Organic Farmers and Gardeners Association has a resource page on its website dedicated to farm planning and hosts an annual conference to

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connect organic farmers in Texas. Locally, the Growers Alliance of Central Texas (GroACT) and the New Farm Institute, two nascent organizations, are providing opportunities to connect new and existing farmers. The GroACT is cultivating a farmer cooperative while the Institute is preparing a new generation of farmers. The Alliance, along with Edible Austin, is also working to address gaps in the distribution system by connecting area farmers with local restaurants. Sustainable Food Centers Farm Direct program is another organization focused on distribution issues, building partnerships between farmers and institutions. Slow Money Austin, a group of local investors, is working to provide capital investment for local agriculture projects. While these efforts are addressing some of the underlying issues facing farmers, they are fairly new developments and will require more time to flourish.

Discussion and Recommendations

Perceptions of a culture of cheap food devalue the labor, time and energy invested in the cultivation of food by small, local farms. People have a general expectation for the cost of food when purchased at a grocery store, with minor fluctuations in price due to season, food borne illness outbreaks, and changes in the agricultural market. This expectation subjects local farmers to criticism and profit loss, debasing local agriculture. "Buy local" agriculture campaigns can help to reverse the trend toward cheap food by raising public awareness, knowledge, and appreciation of local agriculture. Food Routes, a national organization that works with communities to reintroduce Americans to

their food, offers a strategic communications program to launch a 'buy local' campaign (foodroutes.org/bl_toolkit.jsp). In Austin, the Austin Independent Business Alliance might offer a partnership through which to focus a campaign on local agriculture. An interim option to raise awareness is to produce a consumer guide to resources for locally-grown food. The Rutland Area Farm and Food Link publishes a Locally Grown Guide, a free directory advertising local farms, farm stands, farmers' markets, restaurants, retailers and specialty food producers that use locally grown food (rutlandfarmandfood.org/local_guide.html). Imperative to these efforts is a delineation of the spatial bounds of the foodshed of Central Texas.

Raising awareness about local agriculture will expand the market for locally-grown food however, without regulations favorable to alternative farming practices and agricultural land uses, the longevity of local farms is still precarious. Of particular issue are regulations regarding the processing of organic livestock, tax exemptions, and water conservation. Regulation of livestock involves local, state and national policies, the transformation of which requires participation from farmers at all levels. In Central Texas, two efforts are underway to open nearby certified organic livestock processing plants -- one is a mobile plant -- which would reduce transportation costs of farmers. At issue though are the burdensome regulatory costs incurred by small farmers who operate onsite processing facilities.

This cost could partially be alleviated by applying

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agricultural tax exemptions to farm facilities under a certain size as well as to the land (see Appendix E). Qualifications for agricultural tax exemptions vary slightly by county and can be detrimental to small farmers. Transparency of intensity standards and statewide gross production values could help to ensure equitable application of tax exemptions. Tax exemptions are important for farmers because they serve to reduce the cost of farming, thereby helping to reduce the cost of food.

Another challenge for farmers in Central Texas is the regulation of water use. Prone to periods of drought, compounded by urban sprawl, water is not always available nor accessible which can be costly for farmers. One means to ensure an adequate supply of water for farms is to designate a Water Conservation District. Similar to the Barton Springs/Edwards Aquifer Conservation District in western Travis County, eastern Travis County along with Bastrop County could pursue a water conservation district with the purpose of conserving water for agriculture. Atascosa, Frio, Wilson, and Karnes counties are all part of the Evergreen Underwater Conservation District created to protect the agricultural industry in this region (evergreenuwcd.org). The Texas Water Development Board offers Agricultural Water Conservation Grants which can be used to purchase and install monitoring devices to measure irrigation well and water use (twdb.state.tx.us/financial/programs/awcg.asp). These measurements would help Central Texas plan effective water conservation strategies.

The sustainability and profitability of agriculture in Central Texas not only depends on continued efforts to promote local agriculture as well as immediate changes to current regulations, it also requires a vision for the future of the agricultural industry. In Minneapolis, the city recently adopted an Urban Agriculture Policy Plan to improve the growth, sales, distribution, and consumption of healthy, locally grown foods (ci.minneapolis.mn.us/cped/urban_ag_plan.asp). This plan would help to guide efforts of the Sustainable Food Policy Board as well as set measurable achievements for the region to celebrate. The Community Food Security Coalition has a guide to help develop “Whole Measures for Community Food Systems (foodsecurity.org/pub/WholeMeasuresCFS-web.pdf).”

Tied into future planning are tools to facilitate the continuation of land for agricultural production. Farm planning, especially retirement planning for farmers as well as an exchange system for farmland is imperative if land is to continue to be farmed. FarmLink is a national effort, individually controlled by organizations or agencies within each state to facilitate the exchange of farmland between farmers by maintaining a database of farmland for sale. The maintenance of this database varies by state. This resource could be maintained by TOFGA, given the resources already available through the organization’s website.

While not addressed by this report, other efforts that would help to strengthen local agriculture in Central Texas would be a better understanding of the ethnic

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diversity of farmers in the region. This would also help to facilitate a wider culture of inclusion of consumers. Additionally, it would be beneficial to conduct a fiscal analysis of local agricultural production similar to a Cost of Community Services analysis by the American Farmland Trust (farmland.org/services/fiscalplanning/default.asp). Together, the efforts mentioned above will help to bolster the local agricultural industry for Central Texas.

Recommendations and Resources

- Launch a “Buy Local” campaign.
 - Food Routes: foodroutes.org/bl_toolkit.jsp
 - Rutland Area Farm and Food Link rutlandfarmandfood.org/local_guide.html
- Make county agricultural intensity standards for tax-emption qualification more accessible.
- Apply agricultural tax-exemptions to onsite processing facilities, not just land.
- Create a water conservation district for eastern Travis and Bastrop counties.
 - Evergreen Underwater Conservation District evergreenuwcd.org
 - Texas Water Development Board Agricultural Water Conservation Grants twdb.state.tx.us/financial/programs/awcg.asp
- Develop a local agriculture policy plan.
 - City of Minneapolis Urban Agriculture Policy Plan ci.minneapolis.mn.us/cped/urban_ag_plan.asp
- Community Food Security Coalition Whole Measures for Community Food Systems foodsecurity.org/pub/WholeMeasuresCFS-web.pdf
- Ceate an online database to facilitate the exchange of farmland.
 - California Farmlink: californiafarmlink.org
 - New York Farmlink: newyorkfarmlink.org
 - Connecticut Farmlink: farmlink.uconn.edu
- Research the ethnic diversity of Central Texas producers.
- Explore options for conducting a Cost of Community Services analysis.
 - American Farmland Trust: farmland.org/services/fiscalplanning/default.asp

Access

Assessment Goal:

Appropriately address disparities in access to culturally appropriate, healthy food based on consumer perception of the regional food system.

Assessment Objectives:

Evaluate nutritional accessibility by inventorying the availability, quality, cost, and origin of healthy produce at regional food providers, including grocery, convenience, and specialty stores; farmers' markets and farm stands; community, school, and backyard gardens; and federal nutrition assistance programs and emergency food agencies.

Identify gaps in physical accessibility by assessing the spatial relationship between existing transportation infrastructure, residential locations and food providers.

Conduct participatory action research to educate and engage community members in identifying social accessibility barriers by surveying participants on their perceptions of the existing food infrastructure and desires for the food system.

Access

Since 1995, East Austin has changed dramatically. While the boundaries of the city have expanded and the demographics of the region have shifted, East Austin continues to house higher concentrations of low-income and minority populations. This project is concerned with 11 zip codes in east Austin: 78617, 78653, 78702, 78721, 78723, 78724, 78725, 78741, 78744, 78745, and 78753. Together, these zip codes form a contiguous area of 285 square miles. These 11 zip codes were chosen as the target area because of a high concentration, above the county average, of individuals below the poverty level, and/or the lack of a full-service grocery store within a reasonable distance for the majority of residents. A full-service grocery store is a retail outlet that specializes in selling a variety of food items from all food groups. It may have an in-store deli or bakery, or carry household merchandise. Grocery store location and poverty rate are factors that contribute to what the USDA defines as a food desert: “an area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominately lower income neighborhoods and communities” (Economic Research Service, 2009).

According to the 2000 Census, all zip codes except 78653 and 78725 have median household incomes below the county median. Seven zip codes -- 78702, 78721, 78723, 78724, 78741, 78744, 78753 -- have median household incomes below the state median as well. Six areas have rates of poverty above both county and state levels: 78702, 78721, 78723, 78724,

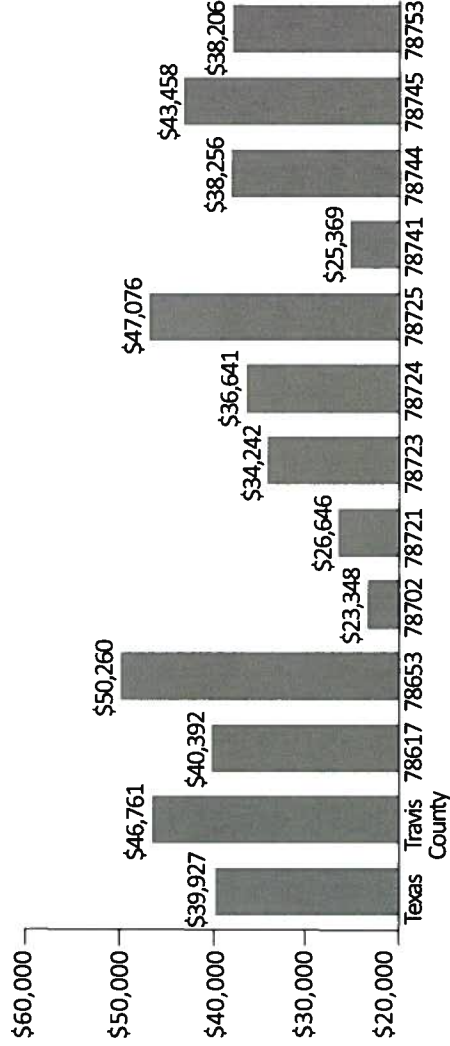


Table 5: Median household incomes for target zip code areas (U.S. Census Bureau, 2000).

	Total Population	White	Black	Hispanic	Asian	% below poverty level
Texas	20,851,820	71.0%	11.5%	32.0%	2.7%	15.4%
Travis County	812,280	68.2	9.3	28.2	4.5	12.5
78617	15,222	59.3	12.1	48.5	1.5	11.0
78653	4,715	70.2	11.7	30.1	0.2	7.8
78702	22,534	30.0	23.7	67.7	0.4	28.8
78721	10,124	23.5	45.2	50.8	0.1	25.7
78723	30,110	40.8	31.8	42.3	1.2	19.6
78724	15,428	29.1	41.4	43.4	0.3	16.3
78725	1,836	49.3	27.9	34.5	2.4	12.0
78741	40,661	49.5	8.8	51.6	5.9	32.9
78744	33,706	46.3	11.7	64.8	1.4	17.6
78745	53,044	66.4	5.9	40.3	1.6	9.5
78753	44,210	48.5	18.7	38.5	6.3	13.7

Table 6: Race, ethnicity and poverty rates in the target study area (U.S. Census Bureau, 2000).

Access

	Total Population	Food Retailer	Full Service Store	Food Pantry	Discount Store
Travis County	812,280	325	85	93	38
78702	22,534	22	3	17	2
78741	40,661	18	2	5	3
78721	10,124	5	-	2	-
78723	30,110	10	4	7	2
78724	15,428	12	-	3	-
78753	44,210	36	8	2	5
78744	33,706	5	1	2	1
78617	15,222	14	-	2	1
78745	53,044	21	7	7	6
78725	1,836	-	-	-	-
78653	4,715	10	-	2	1

Table 7: Number of food resources in each target zip code.

78741 and 78744. Three have rates below both state and county poverty rates: 78617, 78653 and 78745. Subsequently, the areas with the highest rates of poverty are also home to majority minority populations.

The two zip codes that could be considered food deserts are 78721 and 78724. There are five convenience stores and two food pantries in 78721, and 12 convenience stores and two food pantries in 78724, but neither area has a full-service grocery store. The emergency food pantries and convenience stores help to supplement one's food diet but they are not a substitute for a full-service grocery store. Even though the median household income in 78725 is above that of the county and the state, this area also lacks a full-service grocery store, an emergency food program and a discount store.

The presence of a full-service grocery store does not guarantee food security. Food access though is affected by other factors including store quality, availability, cost and distance. Additionally, not every person in a food secure location is food secure. Even in zip codes with rates of poverty above county and state levels, a number of individuals still fall below the poverty level. This is particularly true in 78745 which is home to seven full-service grocery stores and seven food pantries as well as multiple affordable housing developments. During a conversation with residents at an affordable housing complex in this zip code issues of store quality, availability and cost were said to affect food access.

Access

Mapping the Food Landscape of Travis County

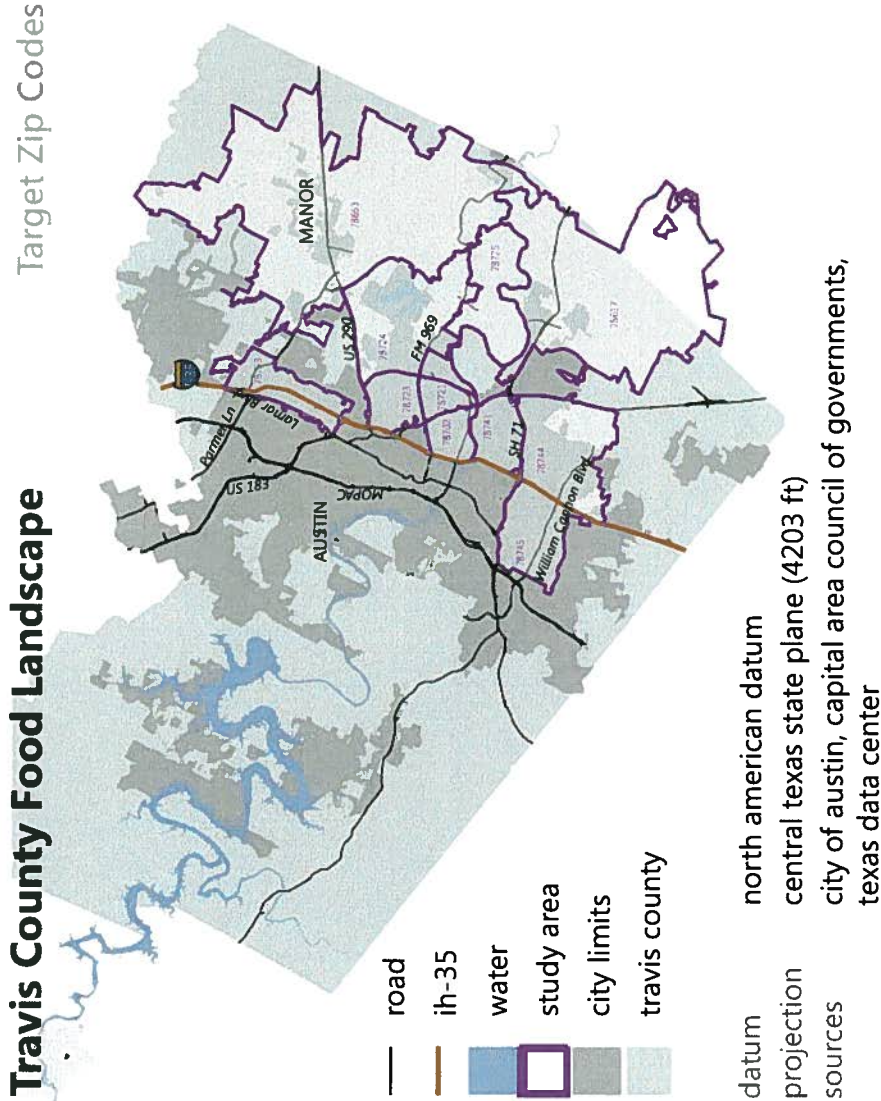
From 2009-2010, information on food resources in Travis County was collected from non-profit and public agencies, and supplemented by online research.

Grocery and convenience store locations in Travis County were obtained from the Texas Comptroller of Public Accounts based on NAICS industry classification of grocery and convenience stores, warehouse clubs and supercenters. Internet searches provided supplemental information on ethnic stores, supercenters and 'discount' stores.

Data on emergency food provider was collected from the Capital Area Food Bank.

Community garden locations were provided primarily by Sustainable Food Center, and the Coalition of Austin Community Gardens.

Farmers' market information was provided by Sustainable Food Center, Edible Austin, Texas Department of Agriculture, Cedar Park Farmers' Market, Barton Creek Farmers' Market, and the Georgetown Farmers' Market Associations.



Travis County Food Landscape

Food Retail Locations

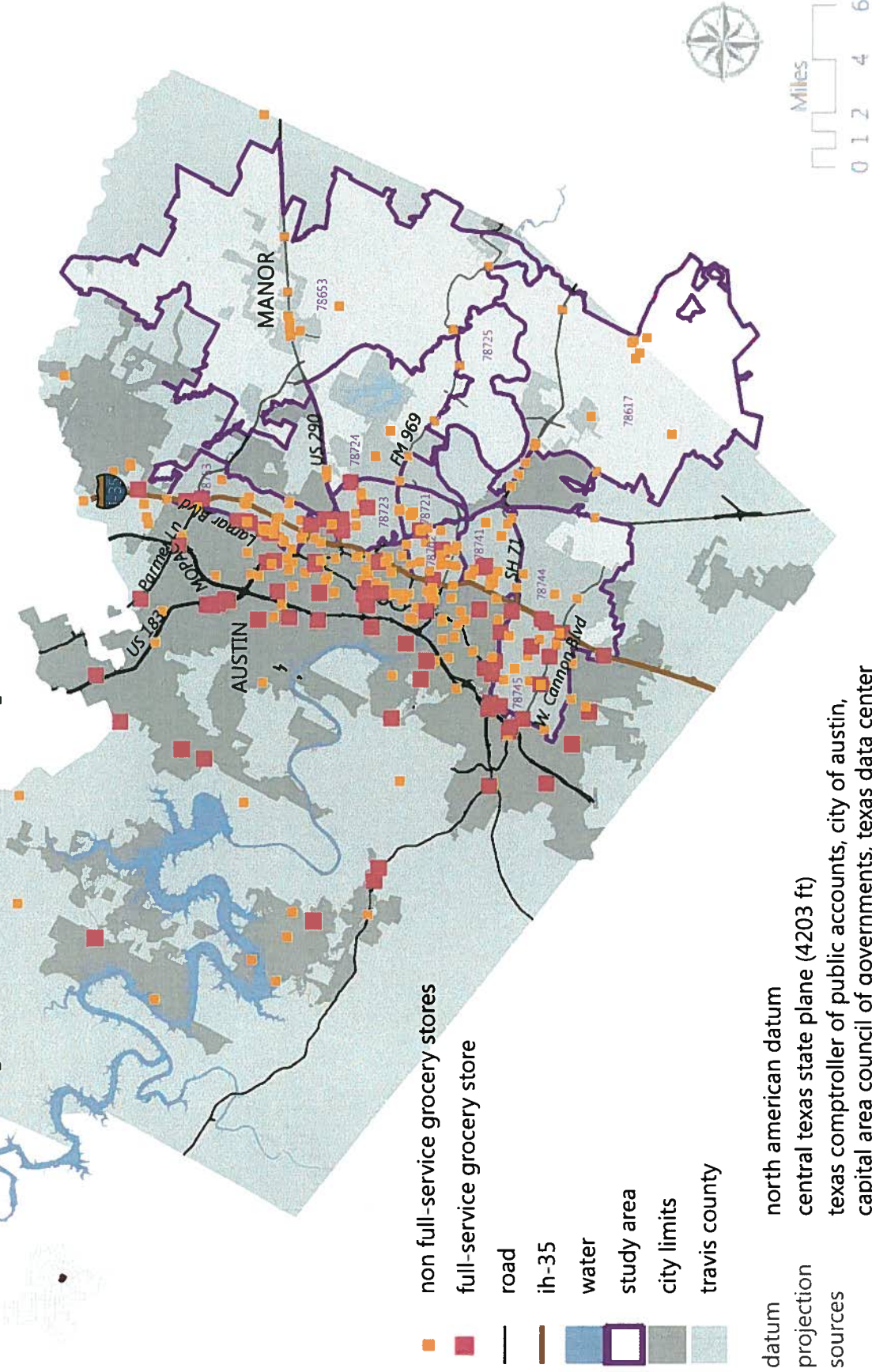


Figure : Grocery and convenience stores in Travis County.

Compounding the need for families to seek food assistance is the lack of easily accessible, full service grocery stores. There are 325 food retail stores in Travis County. These include full service stores like HEB; wholesale stores like Sam's Club; convenience stores like Diamond Shamrock; and ethnic stores like Hong Kong Market.

Travis County Food Landscape

Full-service Grocery Stores

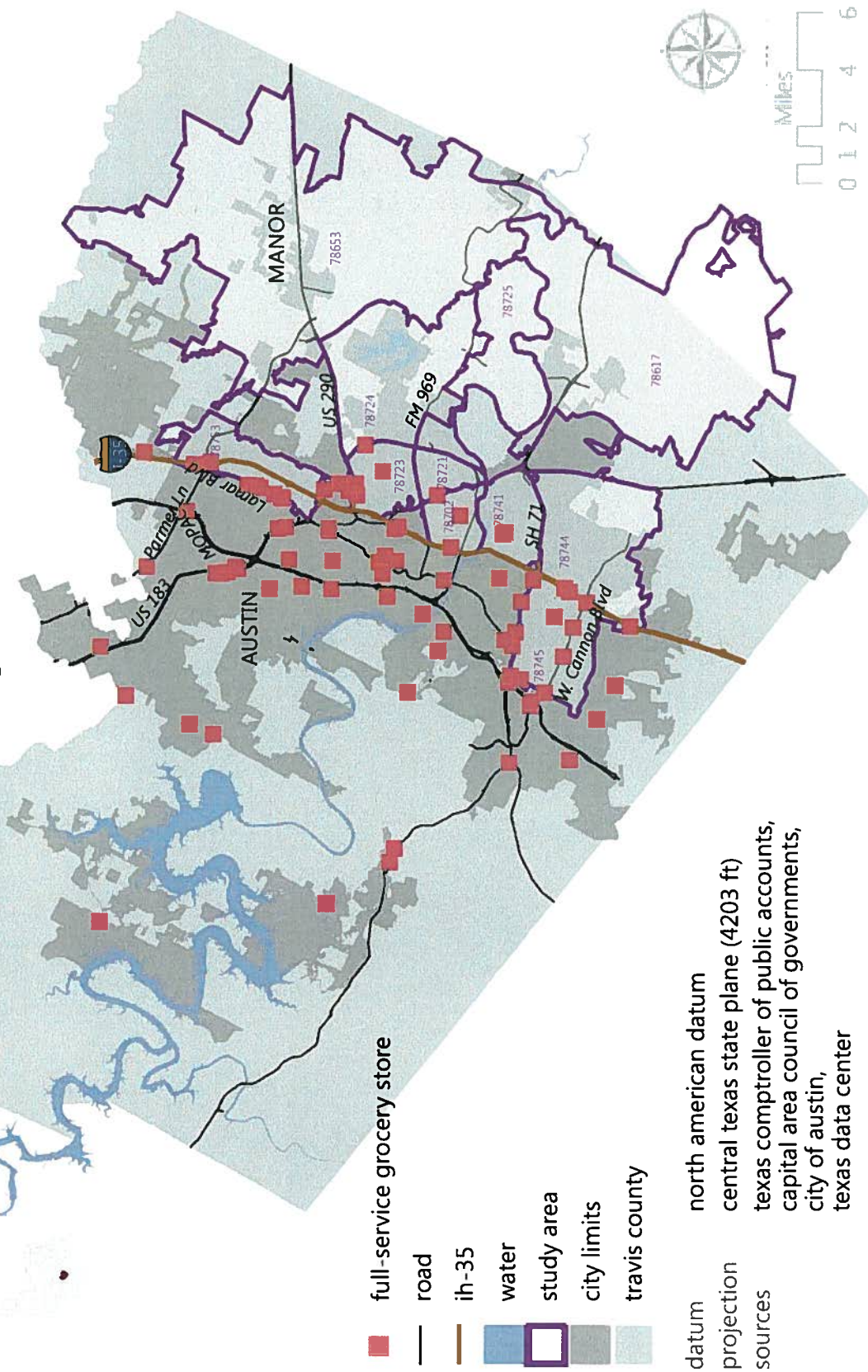


Figure : Full-service grocery stores in Travis County.

There are 85 full-service grocery stores, including major chains like HEB and Walmart, smaller local stores like Wheatsville and Fresh Plus, and chain meat markets like La Michoacana and La Hacienda. Within the 11 target zip codes, there are 153 food retailers, including 25 full-service grocery stores. Both 78745 and 78753 contain the most full-service grocery stores, along with the most people of all of the target zip codes. The proximity of these areas to IH-35 makes them attractive sites for retail services. Of the 11 zip codes in the study area, five lack full-service grocery stores (78617, 78653, 78721, 78725, and 78744), with the nearest grocery store being between three to 15 miles away.

Travis County Food Landscape

Food Pantries

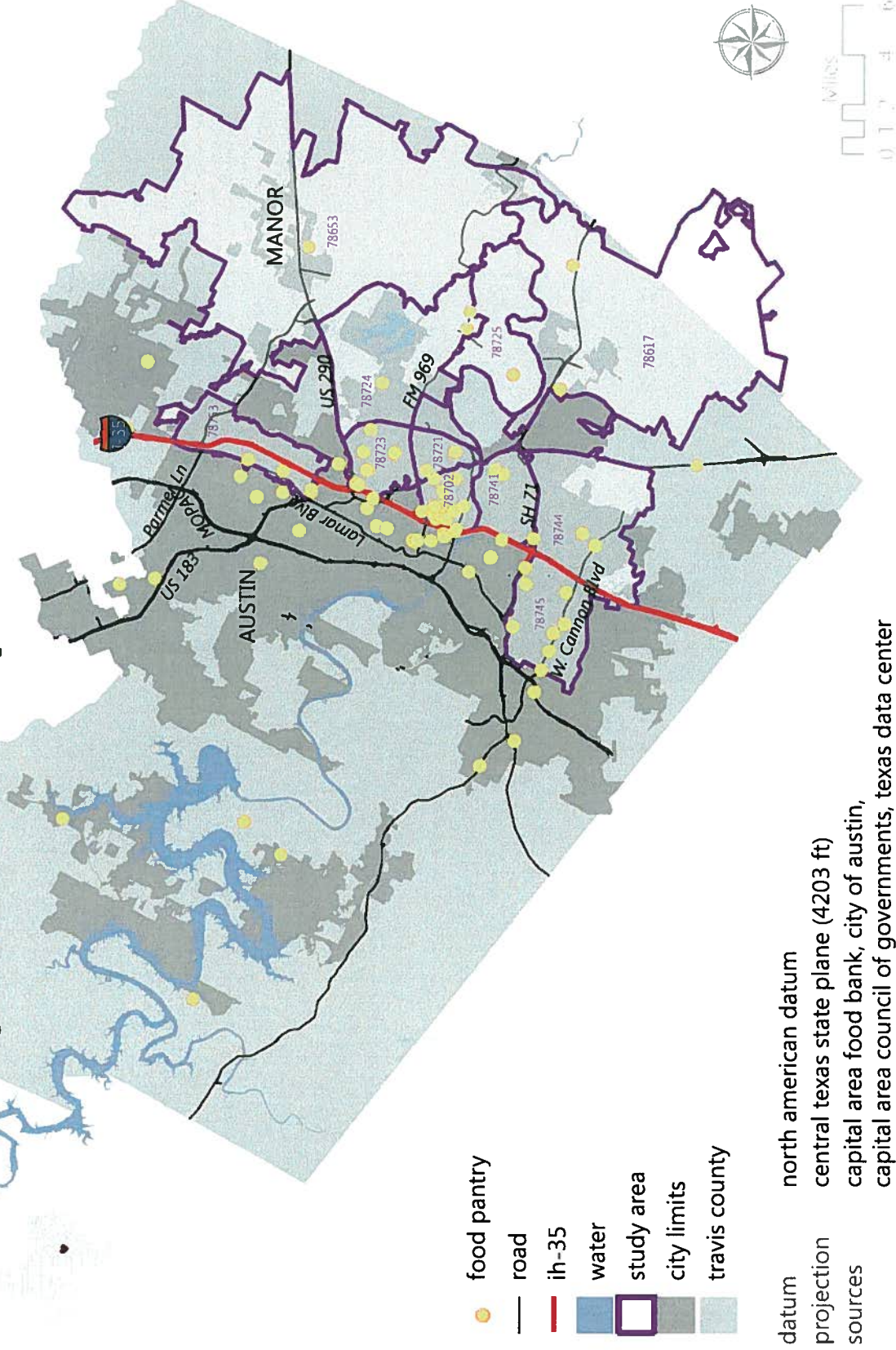
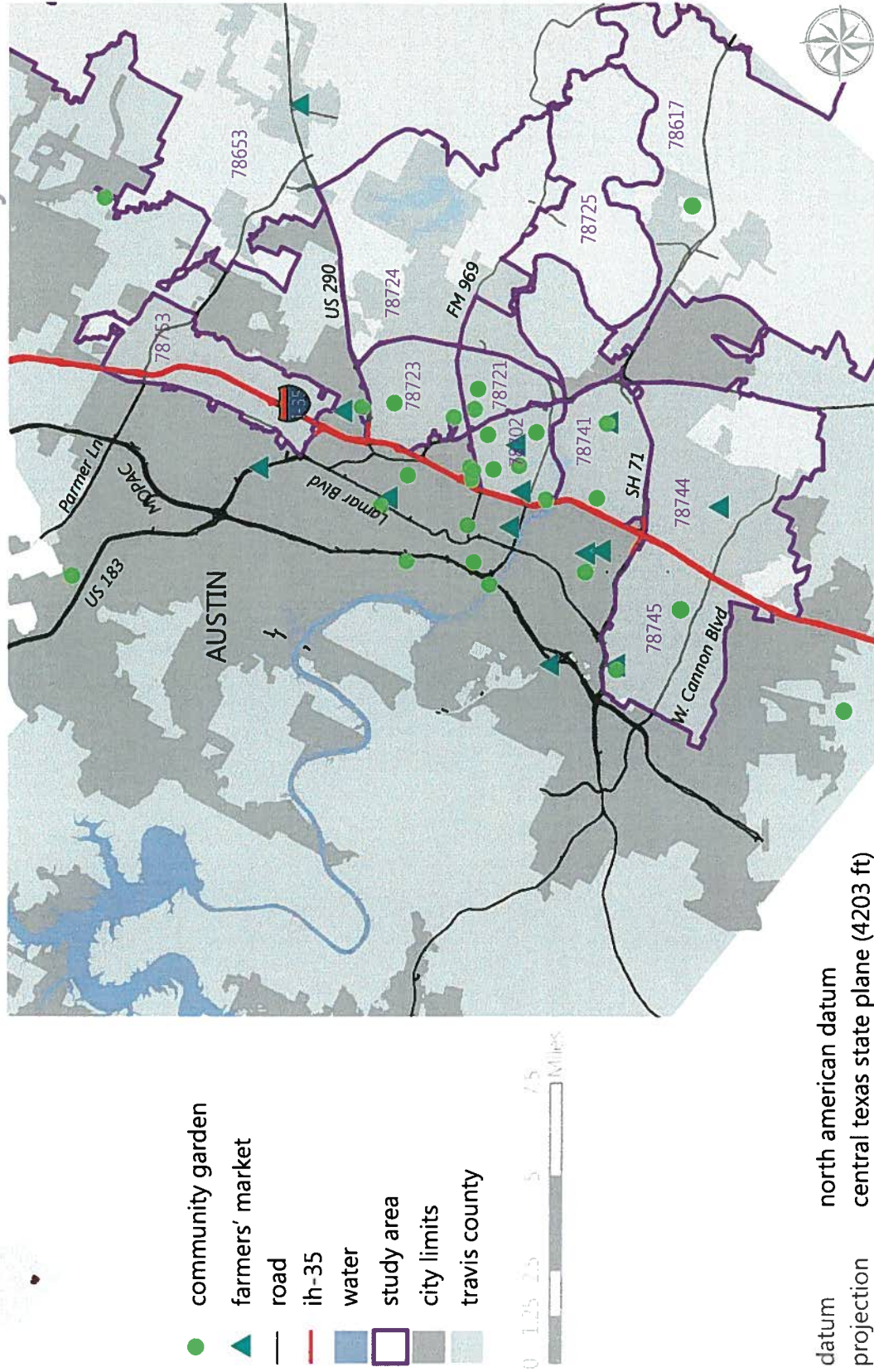


Figure : Food pantries in Travis County.

Without a nearby grocery store, residents turn to emergency food programs, community gardens and discount stores to help meet their food needs. Of the 93 emergency food providers in Travis County, half (49) are in the target zip codes. By far, 78702 has the most emergency food programs (17) due to its proximity to downtown and the abundance of social services located in the area.

Travis County Food Landscape

Farmers' Markets & Community Gardens



datum north american datum
 projection central texas state plane (4203 ft)
 sources sustainable food center, barton creek farmers' market, cedar park farmers' market, river valley farmers' market association, georgetown farmers' market association, capital area council of governments, city of austin, texas data center

Figure : Community gardens and farmers' markets in Travis County

Thirteen out of 28 community gardens in the county are located in the target zip codes.

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Conversation Locations	
Austin's Colony Community Center	78725
Dove Springs Recreation Center	78744
East Rural Community Center	78653
Elroy Public Library	78617
Gus Garcia Recreation Center	78753
Haynie Chapel	78617
LBJ High School	78724
Oak Meadows Baptist Church	78744
Rosewood Zaragoza Neighborhood Center	78702
Ruiz Branch Library	78741
Sierra Ridge Learning Center	78745
South Rural Community Center	78617
St. James Episcopal Church	78721
Turner Roberts Recreation Center	78724
Windsor Park Branch Library	78723
YMCA East Communities	78723

Major Themes

Barriers to Healthy Food Access

- High price of fruits and vegetables
- Inconvenience
- Poor quality of food
- Poor shopping experience

Strategies to Cope with Barriers

- Comparing store prices
- Looking for specials
- Buying in season
- Cooking at home

Where do we go from here?

- More full-service grocery stores
- Better grocery store environments
- Farmers markets in neighborhoods, schools
- More small agriculture (community & school gardens)

Methodology

From June to October, 2010, 19 conversations were held at 16 venues in the 11 target zip codes. These venues included publically accessible and privately run institutions. Two of the sites were privately managed community centers. Three were churches. Seven operated weekly emergency food assistance programs.

Community conversations were interactive discussions guided by 15 open-ended questions about food shopping and eating habits, transportation, cost, nutritional education, neighborhood-specific social concerns, and opinions on how to improve food access. Before the conversations, participants individually filled out a 26-question survey about the frequency of meal preparation, dining out, financial constraints, possible incidents of food insecurity, and demographics. The conversations were held at convenient times for residents, were conducted in English and Spanish, and lasted from 30 minutes to an hour. Participant were compensated for their time with a box of local produce.

Participants were: 1) from one of the 11 target zip codes, 2) responsible for household food needs, and 3) between the ages of 18-65. Over 20 community leaders, including church pastors, social service providers, non-profit directors, neighborhood association members and passionate residents were contacted before the conversations to help determine venues and times for the conversations, and to help recruit participants. Flyers were distributed to schools, select businesses, and door-to-door.

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Participants

A total of 166 people -- 110 female, 28 male, and 28 not reported -- participated in the conversations. The majority of participants resided in zip codes in East Austin, were of Hispanic origin, and were female. A significant proportion of participants were of ethnic minorities. In 2000, the population of Austin was 53% Caucasian, 30% Hispanic, 10% African American, and 5% Asian. In 2010, the population of Austin was 49% Caucasian, 35% Hispanic, 8% African American, and 6% Asian. Comparatively, the ethnic composition of conversation participants was 16% Caucasian, 63% Hispanic, 17% African American and 1% Asian. Of the 63% Hispanic or Latino participants, 67% reported to be Mexican while only 13% claimed to be Mexican American. The majority (53%) reported to speak Spanish most of the time.

Over three-quarters (77%) of participants earn less than \$1,999 per month. According to the Center for Public Policy Priorities, a family of four with two adults and two children needs to earn a gross monthly income between \$3,637 and \$4,423 to afford to live in Austin (Hagert, 2007). Only 11% of participants earn enough to afford to live in Austin based on this estimate. Only 33% of participants receive Supplemental Nutrition Assistance Program benefits and 21% receive Women, Infants, and Children benefits.

# of participants from zip code	%
78617	17
78621	4
78645	1
78653	17
78702	5
78704	4
78721	3
78723	15
78724	13
78725	15
78741	2
78742	1
78744	5
78745	16
78747	2
78752	1
78753	15
78754	6
78758	5
78759	1

Table 9: Household zip code of participants.

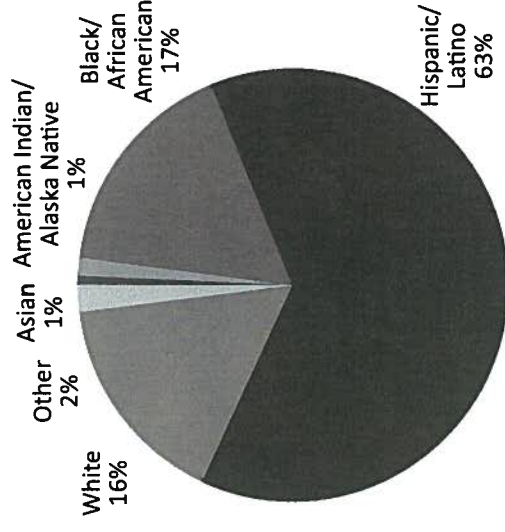


Table 10: Racial & ethnic distribution of participants.

Language participants speak most often	%
Spanish	80
English	65
Other	4
I don't know	2
	1

Table 11: Language spoken most by participants.

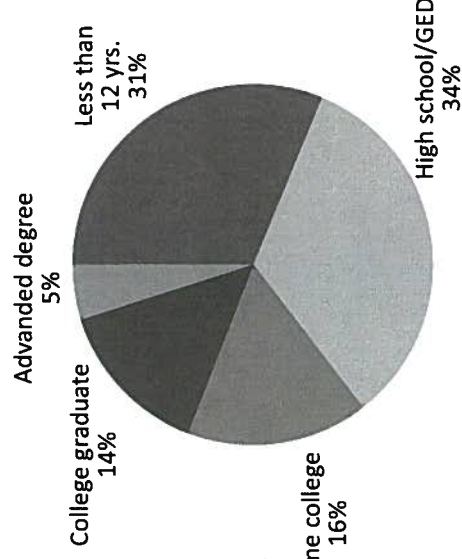


Table 12: Educational attainment of participants.

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Findings

With the exception of those who participated in conversations in the 78745 and 78753 zip codes, most responses reflected a general discontent with either the quality or lack of grocery stores in their neighborhoods. Residents from 78617 and 78653 are particularly interested in food access because of the distance they must travel to a full-service grocery store since none are located in their neighborhoods.

The Cost of Food

As one woman at St. James Episcopal Church in East Austin stated: “it’s hard to always have what you need if you don’t have money to buy it.” It is no surprise that the cost of food is a shared concern for the 166 conversation participants. Of the top three factors participants indicated affect their shopping decisions -- price, quality, and taste -- price is by far the number one factor.

For families with limited financial resources the need to stay within a fixed budget causes a tradeoff between healthy foods and calorie-dense foods. Participants responded unanimously that fruits and vegetables are important because they provide vitamins, nourishment, strength, help lower cholesterol, cause one to think clearly, and prevent diet-related diseases. Fruits and vegetable “help your body balance and process everything properly.” The issue is fruits and vegetables are comparatively more expensive because you need more to feel full but the feeling does not last long. Therefore, families with fixed incomes face

a dilemma of choosing between their desires for a healthy meal and meeting their basic needs.

The price of food and budget limitations force more than just a tradeoff between healthy foods and satiety, they also limit families’ options, both in terms of variety and production method. Participants would buy the same products week after week, shopping without a list, because the cost and preparation methods are known. This knowledge is passed down from generation to generation as one woman at the YMCA East Communities indicated: “I eat how my parents used to. [My kids] wanna eat it because they get used to it. Cause, what you eat most likely that’s what you’ll make for them. Like, while they’re little they’ll get used to it.” Factors like taste and familiarity influence what is on one’s grocery list but the cost of food affects what is crossed off the list.

Additionally, the influence of cost is such that participants do not buy organically grown produce because the price is too high. This general sentiment was summed up by a woman at Sierra Ridge: “it’s important to eat that [organic] food but sometimes it’s not possible to buy them. That type of food is expensive.” Participants would be willing to pay slightly more for organic but the current gap between organic and conventionally grown produce is too large. Cost therefore is a critical factor in grocery shopping decisions. The cost of food reduces the diversity of one’s diet and contributes to decision making that is counter to one’s values: choosing satiating over salutary

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foods even though a healthy diet is of importance; and purchasing conventionally over organically grown produce.

Store Proximity

Even though the price of food is the primary factor affecting the food shopping decisions of participants, the proximity of full-service grocery stores, as well as the quality of produce at the stores also affect purchasing decisions. For participants at the conversations at Elroy Public Library, Haynie Chapel, Austin's Colony, South Rural Community Center, and East Rural Community Center the lack of a full-service grocery store nearby was of particular concern. Located in transitional areas between the urban core and the rural countryside, a lack of planning to include basic service amenities with the low density development in these areas contributes to the lack of full-service stores. At times, residents have to travel up to 20 miles to buy groceries. For families on fixed-incomes, grocery shopping therefore is no longer a solitary errand. It requires forethought to incorporate into one's daily commute or merge with other errands, and requires advanced preparation to place a cooler full of ice in the car so food does not spoil.

If an item is forgotten then a family must do without or alter their meal. Most participants preferred to do without the ingredient instead of going to a corner store. Corner stores are unanimously perceived to be expensive with limited, low-quality produce. The limited and expensive variety of healthy foods available

in corner stores is a public health concern because families in areas without full-service grocery stores must rely on these stores at times to supplement their diets where low-nutritional value items are cheaper.

Quality

As mentioned above, quality, especially of produce and meat, is one of the three main factors participants consider when making their shopping decisions. Terms like freshness, not mildewed, not wilted, not bruised, not rotten, good appearance, looks good, good shape, pretty, nice, and fresh were used to describe expected food quality. The quality, combined with the price of the food, as opposed to location or convenience, tend to be the main reasons participants shop at a particular store.

Not only are participants concerned with the quality of produce, they are also concerned with the quality of the stores in their neighborhood. For participants at Windsor Park Branch Library, LBJ High School, Dove Springs, Elroy Public Library, Sierra Ridge, Gus Garcia Recreation Center, and East Rural Community Center, the quality of a store affects where they shop. Differences in price, store selection, and the physical condition of the store all contribute to decisions about where to shop. Store quality amongst HEBs is reported to vary, causing some participants to bypass their neighborhood store for a store across town. The quality of the HEB store at Ed Bluestein and Springdale Road was repeatedly spoken of negatively. As one woman explained during a discussion at LBJ High School, "The Springdale HEB, I

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don't like it in there because...the food is not as fresh and it's not as quality and the prices there are much higher than they are at other stores that have better quality and quantity." Remarks were also made about problems with panhandling and crime, traffic in the parking lot, and lack of cleanliness, variety and upkeep. There was an implicit sense of a racially-motivated stigma surrounding the store. Refuting the idea that the store could be improved, a male participant at the Wondor Park Branch Library discussion stated: "It's the product of the neighborhood not enough they could do to make it make sense." The unsatisfactory quality of neighborhood stores causes participants to travel farther, expending more gas and time, placing an unjust burden on fixed-income families.

Cost Savings

To cope with budgetary constraints on grocery purchases, participants adopt techniques to either stretch their food dollar or to save money. Participants regularly buy in season, seek sales or specials, and compare store prices in order to be able to purchase more for less. Season is another of the three factors participants consistently said affect their shopping decisions because produce, especially fruit, purchased in season is cheaper and tastes better. Other tactics used to maximize food budgets are to seek specials and compare prices between stores. Borrowing the aptly descriptive name used by one female participant at Haynie Chapel, most participants are "couponaholics". They seek out discounts, specials and sales in order to save money.

Another way for participants to save money is to prepare meals for their families at home. Responses during conversations and to survey questions indicate that most participants consistently prepare at least one meal, mainly dinner, for their families. Over 52% of respondents claim that their family dines together almost every day while another 31% eat together more than half of the time. Eating at home is reported to be healthier and more economical.

From Farm to Store

Fresh is best. Eating fruits and vegetables is important to participants, especially if they are fresh. The preference for fresh produce is indicative of participants' responses for how to improve food access in their communities. The responses are reflective of the tension discussed previously between cost and values. They are also representative of the economic and physical situation of participants. The ideal for participants varied from having food delivered to one's door, to being able to purchase whatever one wants, to raising a big garden. Responses reflected the conditions that surround participants. For participants who live in rural, grocery store deficient areas, the ideal is a farm or a garden. For those who live in urban areas with a proximate grocery store, the ideal is improvement of present amenities.

The solution to increase access to healthy food in the peri-urban areas was consistently said to be a full-service grocery store in a convenient location with a wide variety of items, rather than a small convenience

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store with a limited selection of items. This is because, as one male participant exclaimed: “They can conveniently make that price ridiculous.” For those within proximity to a grocery store, solutions focused on improving the quality of food available by creating a space for a community garden with classes on how to grow food, improving the condition of nearby stores, and hosting a weekly farmers’ market.

Discussion of farmers’ markets emerged during most of the conversations and elicited varied reactions. A farmers’ market would serve the desires of participants with the provision of easily accessible, fresh, often organic produce. They are relatively easy to develop since they do not necessarily require a brick and mortar storefront. However, there was resistance to this solution because of perceptions about the markets currently in Austin. Participants indicated that the markets are expensive, too far away, and not at convenient times. While participants had heard talk of farmers’ markets in the city, only a handful were familiar with their locations, which were not convenient for participants. Overwhelmingly though, the main concern with farmers’ markets was the price of produce, specifically in Central Texas.

Discussion and Recommendations

The location of full-service grocery stores in the peri-urban areas of this study was recommended by participants as the most desirable solution to improve food access. Neighborhoods with chains grocery stores pay less for food (Chung, 1999;

Ford and Dziewaltowski, 2008; Leibtag and Kaufman, 2003; Powell et al, 2007). The location of a chain store in these peri-urban areas would reduce the cost burden by shifting reliance away from high priced convenience stores and reducing travel for grocery errands. Successful recruitment of a chain store would require a market feasibility study, identification of multiple possible locations, incentives, strong political leadership, and proactive participation on the part of the local government or a nonprofit organization. (Pothukuchi, 2005). Underlying all of these elements is a plan to guide development.

While a chain grocery store can have myriad benefits, including outside investments, jobs and neighborhood pride, it can also negatively affect a neighborhood (Eisenhauer, 2001). A chain store in a peri-urban area could spark uncontrolled development beyond the city limits, leading to further fragmentation of already endangered agricultural land. Organized, active participation from residents to plan for and site the location of a future store can help to control development.

Improve Store Quality

Improving the quality and variety of products at existing stores within the target zip codes could increase the frequency with which participants shop at their neighborhoods grocery stores. This is beneficial not only for the customer because it saves on travel costs and improves neighborhood pride, but it is also profitable for the grocery store. Exemplar stores,

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according to participants, have a wide variety of good quality produce, including organic, along with appealing product labeling, cooking and tasting demonstrations, a clean facility, and sufficient parking and staff.

Alternative Food Sources

A chain grocery store is not the only solution, however. A cooperatively-run, community based grocery store or a locally-owned store are other options and may present a better solution because they provide an outlet for the community's voice. The challenge is to develop a dependable customer base by offering a wide enough variety of desired food products within a limited space without price gouging. Creating a perception that differentiates a small grocery store from a convenience store is imperative. Unanimously participants are unwilling to shop at a convenience store even if the store sells healthy produce. This rejection of healthy corner stores has implications for trends toward reliance on corner stores as temporary solution to fill the gap in access.

A suggested alternative to retail stores is a farmers' market or a mobile farm stand. A farmers' market or a mobile farm stand would fulfill the desire for fresh produce but would only increase access to certain foods. Even though participants value and prefer to eat fresh produce, the bottom line is cost. If the price of produce at such markets is not near that of common chain stores, then this may not be a viable option. For local farmers, this means possibly offering produce at wholesale cost in low-income areas. Government

assistance programs, like the USDA Supplemental Nutrition Assistance Program (SNAP) and Women, Infants and Children (WIC), and double value coupon programs, like Wholesome Wave, can help alleviate cost barriers to farmers' markets for low-income households. These efforts however, suffer because of low enrollment due to a lack of knowledge about available resources; the assistance amounts are too low to bridge the gap in price; the benefits are distributed out of season; or the benefits are not redeemable due to a lack of cost prohibitive processing equipment. Overall though, more education about and experience with local farms is needed to actively engage low-income customers in the local food system.

Encouraging engagement with farmers' markets amongst minority populations requires additional efforts towards place making and the integration of cultural codings that resonate with the community (Alkon, 2008; Guthman, 2008). This means stepping beyond a focus on food to directly target the racial and economic inequalities that perpetuate food insecurity (Guthman 2008). Providing incentives for or selectively inviting minority farmers into the market, offering culturally-appropriate foods, creating key allegiances with minority-led community organizations, and presenting culturally-sensitive message framing can all help to begin to break down structural inequalities.

Loss of Agricultural Knowledge

Generational gaps in the understanding of where food comes from were exemplified in a couple of

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conversations. Recognition of a loss of gardening and agricultural activities was especially prevalent amongst African American participants. Participants however, expressed a desire to reverse this trend. Although less than a quarter of participants keep home gardens, a desire for fresh food makes participants interested in learning to grow their own produce. Community gardens were repeatedly mentioned as solutions to increase access to healthy food. Targeting the development of community gardens in neighborhoods with high concentrations of African Americans would allow for the opportunity to capture waning generational knowledge about gardening.

Cultural Sensitivity or Assimilation

Learning to prepare traditional recipes also provides an opportunity to pass along generational knowledge. Traditional meals embody information about cultural customs, social values, and the ecoregion in which the ingredients are produced. Some participants, especially Latino participants, expressed a desire to retain their food heritage. The lack of availability of culturally-appropriate ingredients is therefore a barrier for these participants as they strive to retain their food heritage.

Seemingly contradictory to the objective of cultural sensitivity is food acculturation. Much of the produce available at local food retailers is either place specific or socially acceptable. Desires to know how to prepare foreign foods was a shared sentiment amongst many participants, including foreign born and US

citizens. The most commonly referenced produce that participants are unaware of how to prepare are eggplant, persimmon, fig, greens and artichoke. Locality specific cooking classes that offer instruction on how to prepare healthy meals using commonly available ingredients would improve the self-reliance of community members by providing them more meal options. Providing information on food budgeting and food preservation along with ways to incorporate a few locally-grown ingredients could help families save money and increase opportunities to access healthy food.

Food Democracy

Limited access to healthy food options unnecessarily and unjustly increases the financial and health burden of fixed-income families, possibly reflecting larger issues of social justice. East Austin has traditionally contained higher concentrations of lower-income residents as well as minority populations. Using IH-35 as the physical dividing line, in terms of sheer numbers, 18 full service grocery stores out of 127 food retailers (14%) in eastern Travis County compared to 64 out of 191 (34%) in western Travis County. Each store in the eastern part of the county serve 20,848 residents compared to 10,140 in the west. Eastern county grocery stores serve twice as many residents as stores in the west. Without easy access to full-service grocery stores, families face a tradeoff between gas and groceries. Because of increases in the cost of groceries and gasoline, more families may be forced to seek food assistance from alternative sources, like food pantries,

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which provide filling but not necessarily healthy or culturally-appropriate food options. Of consideration then is the shared frustrations of this ethnically-diverse sample of residents from a common geographic area which reflect possible inequities in food access in Austin.

People, and by extension one's community, are crucial elements in transforming the structural inequities that constrain food access. To escape the trap of performing like a charity instead of a movement, efforts to improve food access must embody food democracy. Food democracy promotes the active participation of individuals in all aspects of the food system, from production to consumption. "The transition to food democracy requires that people develop the knowledge and skills necessary to actively participate in society and to have an impact on different political levels (Levkoe, 2006)." Opportunities that provide people some level of food autonomy will help individuals to develop a personal narrative about the value of food security.

Recommendations and Resources

- Facilitate local government and non-profit partnerships to pressure chain grocery stores to locate in areas lacking a full-service store.
- Conduct a market feasibility study to identify possible locations
- Explore options for an incentive package for chain stores to open locations in low-income areas.

- Ensure uniform store quality across the county.
- Pressure all chain stores to offer a wide variety of good quality produce, including organic, to keep a clean facility, offer sufficient parking and staff, and host cooking and tasting demonstrations.
- Pursue options for a farmers' market or mobile farm stand in areas that lack a full-service grocery store, like 78617.
- Explore options for an African-American-centric community garden, perhaps in 78721.
- Pursue key allegiances with appropriate non-profit organizations and/or churches to engage select community members in organizing the garden.
- Offer cooking classes on how to incorporate locally-grown ingredients into a meal on a budget.
- Foster an ethnically-diverse local food system.
- Encourage the local production of traditional, cultural food ingredients, like nopales or diakon radish.
- Provide incentives for or selectively invite minority farmers to participate in the farmers' market.
- Ensure that messaging for a 'buy local' campaign is culturally-sensitive.

Conclusion

Carrying forward the rich agricultural tradition of Texas, the Central Texas region is home to a diversity of small to medium-sized farms and ranches who rely on the capital city for their primary sales outlets. The future of these agricultural producers is in jeopardy though due to burdensome regulations, diminishing water supplies, and a pervasive culture of cheap food. While the region boasts an extensive network of supportive local government and non-profit resources, raising public awareness about the local food system is a priority for farmers. Of consideration for the region is a 'buy local' campaign to publicize the rich and diverse food resources available within proximity to the capital city. A 'buy local' campaign would not only be beneficial for farmers but would also support consumer demands for more fresh produce. In areas that lack a full-service grocery store, like 78617, 78721, 78724 and 78725, knowledge about proximate farmers' markets, farms or community gardens would offer consumers an alternative source for healthy foods other than nearby convenience stores.

While farmers' markets and community gardens provide an alternative solution to issues of physical access to healthy foods, the cost, quality and variety of available foods are still of concern for consumers. Due to inequitable standards in store quality, and/or the lack of a proximate full-service grocery store, consumers are traveling outside of their neighbors to purchase food at a store perceived to be of high quality. This causes a tradeoff between gas and groceries, particularly for low-income families. Equitable access to quality stores, or

to alternative food sources, is key to ensuring that all residents have access to healthy food.

Access and exposure to healthy food, especially locally-grown food is one step toward transforming the culture of cheap food. For Central Texas, education is key to ensuring a just food system for local producers and consumers. Education about how to prepare healthy meals that incorporate locally-grown ingredients or regionally-specific produce, on a budget, would broaden the food options of consumers. Education about the location of alternative food sources would increase the customer-base of local farms. It is imperative though that dissemination of this information be sensitive to and inclusive of cultural differences so as to invite all Central Texas residents to participate in the future of their food system.

Supporting Documents

Appendix A: Census of Agriculture Profiles

	1992	1997	2002	2007
Bastrop				
Number of Farms	1,630	1,765	2,187	2,207
Average Farm Acreage	242	222	193	182
Principal Occupation: Farming	699	703	1,164	839
Principal Occupation: Other	931	1,062	1,023	1,368
Estimated Market Value of Land and Buildings (\$/acre)	1,176	1,422	1,859	2,743
% of Land in Farms	69.5	69.0	74.4	70.7
Caldwell				
Number of Farms	957	1,068	1,402	1,421
Average Farm Acreage	276	248	217	214
Principal Occupation: Farming	422	447	757	566
Principal Occupation: Other	535	621	645	855
Estimated Market Value of Land and Buildings (\$/acre)	948	1,303	1,676	2,317
% of Land in Farms	75.6	75.9	87.3	87.3
Hays				
Number of Farms	704	816	1,106	1,136
Average Farm Acreage	658	366	252	207
Principal Occupation: Farming	277	311	522	387
Principal Occupation: Other	427	505	584	749
Estimated Market Value of Land and Buildings (\$/acre)	953	1,928	2,877	2,825
% of Land in Farms	100.0	68.8	64.2	54.3

	1992	1997	2002	2007
Travis				
Number of Farms	1,015	1,038	1,306	1,214
Average Farm Acreage	328	382	229	216
Principal Occupation: Farming	419	382	670	437
Principal Occupation: Other	596	656	636	777
Estimated Market Value of Land and Buildings (\$/acre)	1,347	1,285	1,801	2,832
% of Land in Farms	52.6	62.6	47.1	41.4
Williamson				
Number of Farms	1,829	2,034	2,510	2,728
Average Farm Acreage	298	265	232	199
Principal Occupation: Farming	893	835	1,245	1,009
Principal Occupation: Other	936	1,199	1,265	1,719
Estimated Market Value of Land and Buildings (\$/acre)	1,061	1,569	2,345	2,816
% of Land in Farms	75.8	74.8	81.1	75.7

Reference

United States Department of Agriculture. (2007). Census of Agriculture: State and County Profiles: Texas [data file]. Retrieved from http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Texas/index.asp

Appendix B: Community Gardens

Community Garden	City	Zip Code	County
Taylor Community Garden	Taylor	76574	Bastrop
First United Methodist Church Community Garden	Smithville	78957	Bastrop
Food Pantry Community Garden	Smithville	78957	Bastrop
Lee A. Fortis Community Garden	Smithville	78957	Bastrop
Mt. Pilgrim Baptist Church Community Garden	Smithville	78957	Bastrop
San Marcos Community garden	San Marcos	78666	Hays
Travis County Southeast Metro Park	Austin	78617	Travis
Manchaca United Methodist	Manchaca	78652	Travis
Blackland Learning Garden	Austin	78702	Travis
Blackshear Community Garden	Austin	78702	Travis
Co-Lab Community Garden	Austin	78702	Travis
El Jardin Alegre Community Garden	Austin	78702	Travis
Festival Beach Community Garden	Austin	78702	Travis
Good Soil Community Garden	Austin	78702	Travis
Homewood Heights Community Garden	Austin	78702	Travis
New Day Community Garden	Austin	78702	Travis
Clarksville Garden	Austin	78703	Travis
Deep Eddy Community Garden	Austin	78703	Travis
Tarrytown Community Garden	Austin	78703	Travis
Lifeworks South	Austin	78704	Travis
South Austin Community Garden	Austin	78704	Travis
Garden of Eden	Austin	78705	Travis
Deloney Street Community Garden	Austin	78721	Travis
Quilombo Community Garden	Austin	78721	Travis
Alamo Community Garden	Austin	78722	Travis
Lifeworks Community Garden	Austin	78722	Travis
UT Concho Community Garden	Austin	78722	Travis
Windsor Park Community Garden	Austin	78723	Travis
Yello Bike Community Garden	Austin	78723	Travis
Grow Together	Austin	78729	Travis
Montopolis Community Garden	Austin	78741	Travis
Parker Lane Community Garden	Austin	78741	Travis
Sunset Valley Community Garden	Sunset Valley	78745	Travis
Hyde Park Community Garden	Austin	78751	Travis
Reagan High School Community Garden	Austin	78752	Travis
Sunshine Community Gardens	Austin	78756	Travis
Elizabeth Milburn Park Community Garden	Cedar Park	78613	Williamson
Heritage Gardens	Georgetown	78626	Williamson
Pecan Street Community Garden	Pflugerville	78660	Williamson
Unity Park	Round Rock	78665	Williamson

Appendix C: Farmers' Markets

Farmers' Market	Location	City	Zip Code	County	Hours	Duration
Bastrop 1832 Farmers' Market	1302 Chestnut St.	Bastrop	78602	Bastrop	Friday, 2:30-6p Saturday, 10a-2p	Year-round
Bastrop Producers' Market, Inc.	977 Hwy 71	Bastrop	78602	Bastrop	Tuesday - Friday, 11a-7p Saturday, 9a-6p Sunday, 12-5p	Year-round
River Valley Farmers' Market: Bastrop	116 Ponderosa Dr.	Bastrop	78612	Bastrop	Saturday, 10a	Year-round
River Valley Farmers' Market: Elgin	410 N. Main	Elgin	78621	Bastrop	Tuesday, 1p	Year-round
River Valley Farmers' Market: Smithville	Main & 1st Street	Smithville	78957	Bastrop	Thursday, 1p	Year-round
Buda Farmers' Market	100 S. Houston Street	Buda	78610	Hays	Saturday, 9a-12p	May - Dec.
San Marcos/New Braunfels Farmers Market Association: San Marcos	204 S. Edward Gary	San Marcos	78666	Hays	Tuesday, 3-6p	Year-round
Wimberley Farmers' Market	601 Ranch Road 2325	Wimberley	78676	Hays	Wednesday, 3-6p	Year-round
SFC Farmers' Market: Downtown	422 Guadalupe St	Austin	78701	Travis	Saturday, 9a-1p	Year-round
SFC Farmers' Market: Neighborhood Farm Stands	locations vary	Austin		Travis	hours vary	May - August
SFC Farmers' Market: The Triangle	4700 West Guadalupe	Austin	78751	Travis	Wednesday, 3-7pm	Year-round
Barton Creek Farmers' Market	2901 S Capital of Texas Hwy	Austin	78746	Travis	Saturday, 9a-1p	Year-round
Dripping Springs Farmers' Market	The Triangle	Dripping Springs	78620	Travis	Saturday, 9a-12p	March - Nov.
Hope Farmers' Market	414 Waller St.	Austin	78702	Travis	Sunday, 10a-2p	Year-round
Manor Farmers' Market	104 E. Rector	Manor	78653	Travis	Wednesday, 4-7p	Year-round
Sassy Pea Farmers' Market	10820 E. Crystal Falls Pkwy	Leander	78642	Travis	Tuesday - Friday, 9a-1p & 2-5p Saturday, 9a-1p	Year-round
South Austin Farmers' Market	2910 South Congress	Austin	78705	Travis	Saturday, 8a-1p	Year-round
Cedar Park Farmers' Market	1890 Ranch Shopping Center	Cedar Park	78652	Williamson	Saturday, 9a-1p	Year-round
Georgetown Farmers' Market: Round Rock Market	200 E Bagdad Ave	Round Rock	78664	Williamson	Saturday, 8a-12p	April - Nov.
Georgetown Farmers' Market	303 East Morrow Street	Georgetown	78626	Williamson	Thursday, 3:30-6:30p	April - Nov.
Georgetown Farmers' Market: Sun City Market	2 Texas Drive	Georgetown	78633	Williamson	Tuesday, 9a-12p	April - Nov.
Georgetown Farmers' Market: Taylor Market	500 N. Main St.	Taylor	76574	Williamson	Monday/Wednesday, 3:30-6:30p	May - August Oct. - Nov.
Pflugerville Farmers' Market	901 Old Hutto Road	Pflugerville	78660	Williamson	Tuesday, 3-7p	May - August

Appendix D: Farmer Survey Results

Total acres owned by respondents	578 acres
Total acres rented by respondents	231.25 acres

Number who have enough land to grow as much as would like	7
Number who do not have enough land	6

Information sources (multiple answers)	Number who use source
Other farmers	12
Internet	10
ACRES	6
Books	6
Conference	5
Texas AgriLife Extension	4
Texas Organic Farmers and Gardeners Association	4
ATTRA	4
Texas Dept. of Agriculture	2
USDA	2
Other: UCSC, Stockman Grassfarmer, Growers Alliance of Central Texas	

Water sources (multiple answers)	
Private water utility	1
Publicly-owned water utility	1
Municipally-owned utility	3
Rainwater	5
Well	10
Other: Surface water	

Plan for retirement	
No retirement plan	6
Pass farm along to family	3
Pass along to other farmers	3

Average number of employees (including self)	
Full-time, paid	4
Part-time, paid	5
Unpaid	41

Type of labor respondents employ (multiple answers)	
Interns	6
Seasonal	4
Migrant	1
Other: Own children, Austin High students	

Employee recruitment sources (multiple answers)	
Word of mouth	6
Website/blog/newsletter	5
References from family or friends	4
Local Harvest	3
World Wide Opportunities on Organic Farms (WWOOF)	3
Craigslist	2
Newspaper	1
Work in Texas	1
Other: Wheatsville Breeze, ATTRA website	

Employ enough people to meet seasonal workload of farm	
Yes	7
No	3

Members of the household employed off-farm	
Yes	5
No	8

Sustain farm without off-farm income	
Yes	8
No	5

Percent of household income from farm	
0%	1
10%	2
40%	1
95%	1
99%	1
100%	4

Financial Assistance	
USDA National Institute of Food and Agriculture Grant	1
Texas Department of Agriculture Grant	1
Farm Service Agency Loan	2
Private Financial Institution Loan	2
None	8
Other: Retired Military, Fundraising	

Appendix D: Farmer Survey Results

Market options (multiple answers)	Markets use to sell farm products	Markets would like to use to sell farm products
Farmers' market	8	0
Direct sales to restaurants	8	0
Community supported agriculture (CSA)	6	2
Wholesale	5	2
Direct sales to stores	5	2
Farm stand	4	0
Delivery service	4	0
Pick-your-own	1	0
Cooperative marketing	0	1
Farm to institution program	0	1
Other:	A new type of cooperative market	CSA at a farmers' market

Provide opportunities for low-income customers (multiple answers)
Accept WIC-FMNP
Donate produce to emergency food provider
Offer work-share option
Accept SNAP benefits
Allow gleanings
Participate in farmers' market in low-income neighborhood
Reduce prices for low-income customers
Reduced CSA price for low-income customers
Other: Welcome all people to farm stand, pre-select customers

Respondent agreement or disagreement with the following statements	Strongly Agree	Agree	Disagree	Strongly disagree
I work cooperatively with other farmers to share information and resources.	5	7	0	0
I base decisions about my farming practices on the requirements for agricultural tax-exemption.	0	2	3	7
I base decisions about my farming practices on requirements for receiving financial assistance from the government.	0	0	2	10
I base decisions about my farming practices on what customers demand.	9	6	1	1
I base decisions about my farming practices on what I like to grow.	5	7	0	0
I base decisions about my farming practices on what will be most profitable.	2	8	2	0
I would like to grow more specialty crops but am unable due to contractual restrictions.	0	0	4	7
I think that it is my responsibility to help meet the food needs of low-income community members.	2	4	2	4

Strategies to increase access to locally-grown food for low-income residents:
• Cut off all government welfare. • Grow their own garden is the best solution. • Partner with institutions that provide food to the poor. • More government subsidies for low income residents, such as increasing WIC coupon amounts or offering more food stamps for fresh produce. Farmers already have a low profit margin. It should not be on farmers' backs to offer high cost food at low cost. The government subsidizes many agricultural products. Why not locally-grown, organic produce? • Organizations could contract with farmer to grow certain crops and arrange distribution. • Marketing campaign to educate public about local farmers. Farms at high schools. More city land used for agriculture.

Appendix D: Farmer Survey Results

Concerns for farm (multiple answers)	
Availability of appropriate supplies (seeds, compost, fertilizers, pesticides)	5
Unnecessary or excessive regulations	5
Access to technical assistance	4
Marketing	4
Transportation	4
Access to equipment	3
Creating a sustainable business plan	3
Financial Assistance	3
Access to a nearby certified organic processor	2
Storage	2
Theft	2
Trespassing/vandalism	2
Availability of skilled labor	1
Complaints from neighbors concerning farming operation (i.e. noise, smell)	1
Access to a nearby processing plant	0
Availability of veterinary services	0

Top 5 obstacles to successful and profitable agricultural market in region	
1. Availability of water	
2. Culture of cheap food/Unpredictable weather	
3. Culture of cheap food	
4. Distribution of products/Understanding of what is 'local'	
5. Access to affordable water/Burdensome regulations	
Most referenced obstacles: Culture of cheap food	

Suggestions of how Sustainable Food Policy Board can support local agriculture:

- Drop the assumption that "organic" has value.
- Eliminate asinine gov't regulations that do nothing for clean healthy food production and everything to hinder producers.
- Encourage new farmers through grants, programs, and land access.
- More marketing, to get the word out about the availability and superior quality of locally grown food. Farmers rarely make enough money to budget for any type of advertising.
- Educate the public to the true costs of the food they eat. Once they understand, they will see local, nutrient-rich, sustainably-grown food as a great value. Education must include lessons on establishing priorities in any budget.
- Promote more cooperation among farmers rather than competition
- Require the County and City to ensure that existing farms have access to the water they have traditionally had to grow food. Require better planning.
- Work with Health Dept. to allow farmers to SAMPLE vegetables and fruits without permits and expensive requirements. Sales will increase.
- Assist farmers with financial resources and marketing.
- Marketing campaign to educate the public about our local farmers and food system.
- Equal promotion of all area farmers, no more 1-3 farmers get all the recognition, events held, newspaper articles on local farmer field days would be a start.

Appendix E: Agricultural Land Appraisal

by Katherine Phillips

In the 1960s, the State of Texas began granting property tax exemptions for agricultural land use to alleviate the tax burden of farmers as Texas land values rose (Breyer, 2003). Since then, the agricultural industry has changed; agricultural tax appraisal standards however do not reflect this change. Standards and processes to appraise agricultural land may need to be revised to reflect changing dynamics of the agricultural industry in Texas. These revisions will help to ensure consistent and equal application of the tax code, particularly for small, urban farms.

Texas Tax Code

The Texas Tax Code defines two (2) exemptions from ad valorem taxation applicable to land used for agriculture:

1. *Assessment of Lands Designated for Agricultural*
Use applies to both the owner and the land (TTC, 23.41-47). To qualify for the Agricultural Use appraisal, agriculture must be the primary occupation and source of income for the owner of the land, and the owner must intend to use the land for agriculture as an occupation or for-profit business for the coming year. In this case, the state defines agriculture as “the use of land to produce plant or animal products, including fish or poultry products, under natural conditions but does not include the processing of plant or animal products after harvesting or the production of timber or forest products. (TTC, 23.42(d)(1))”

Additionally, the land must have been devoted exclusively to or developed continuously for agriculture for the preceding three years. The application must be resubmitted each year to maintain the designation.

The appraisal value of the land is estimated based on the net income the land would have generated for the past five years using prudent agricultural management practices. Included in the estimate is consideration of appurtenances to the land such as water rights, dams, wells, and roads. Other improvements, excluding mineral estate and land used for residential purposes, are appraised at market value. This can be detrimental to small or medium farms that rely on on-site processing. On-site processing facilities, such as abattoirs, wineries, and canneries, can increase a farm’s revenue, but the market value appraisal increases a farm’s costs. Allowing processing facilities under a certain square footage to qualify for special appraisal could help small farms reduce their operating costs.

2. *Open Space* (TTC, 23.51-59) applies only to the land, not also the owner. To qualify, the land must have been devoted primarily to one of the following activities for five of the previous seven years: agricultural use to the intensity generally accepted in the area, to timber, or to the production of forest products; as an ecological laboratory used by a college or university; to

Appendix E: Agricultural Land Appraisal

raising exotic animals that produce tangible items of a commercial value; to land that is left idle or cover cropped for participation in a government program or as part of agricultural rotation; or to land used for wildlife management. Once qualified, an application for special appraisal does not need to be resubmitted unless the land changes use or shifts to another category of open space.

Under Section 23.56 of the Texas Tax Code, a parcel may not qualify for open-space appraisal if it is within the jurisdictional boundaries of a city or township; receives public services comparable to other parcels with similar land utilization, density, and topography; or was not used principally for agriculture for the five consecutive years prior to application. If agricultural use of the land stops, the owner is subject to a tax rollback and must pay the difference between the market value tax rate and the appraisal rate for the previous five years.

County Rules and Processes

The rigorously defined set of appraisal standards can be detrimental for smaller farms. The intensity of agricultural activity occurring on a parcel of land qualifying for special appraisal is assessed annually. Land use categories and associated productivity levels are set by the chief appraiser for each county (State Property Tax Board, 1990). All applications for special appraisal are categorized and compared to the district's standards. To receive the annual tax relief, the

land must meet minimum harvest amounts as well as standard agricultural management practices, based on trends in fertilizer, herbicide, and pesticide application. For example, Brad Stufflebeam of Home Sweet Farm was almost denied an agricultural exemption because his operation failed to meet the agricultural intensity standards of Washington County (Walker, 2009). Some counties may favor certain forms of agriculture over others and deny exemptions to small farms that would otherwise meet the qualifications for special appraisal as defined by the State of Texas.

Recommendations

Tax relief is vital for the survival of small farms in Texas (J. Assata, personal communication, July 2010) and needs to be extended fairly to all agricultural operations. An equitable tax system will ensure that all farmers seeking special appraisal status have access to the information used to establish intensity standards in their district. While it might not be possible for each appraisal district to provide this information directly to their constituencies, partnering with the Texas Cooperative Extension Service could help to expand the distribution of information. The Texas Cooperative Extension Service website could serve as host to information about the tax application and appeals process, and intensity standards for agricultural production, both in English and Spanish. Additionally, the appraisal process should be revised so that site visits occur before one's tax status can be changed. Alternatively, the Texas Tax Code could be revised to

Appendix E: Agricultural Land Appraisal

set statewide gross production value standards based on parcel size rather than requiring extensive land categorization and local intensity determinations. The State of Washington clearly defines these thresholds in a legislative document and does not leave the matter up for interpretation (RCW 84.34.020). Clarifying the intensity standards at a district or state level, not the county level, will also help ensure that the process for special appraisal is clear and consistent.

References

Breyer, R.M. (2003, May 7). Owners of \$250 Billion in Property Benefit from Exemptions, Loopholes Amid School Crisis. *Austin American-Statesman*. Retrieved from <http://www.statesman.com/specialreports/content/specialreports/schoolfinance/0507exemptions.html>.

State Property Tax Board. (March 1990). The Agricultural Appraisal Advisory Board: Information for Appraisal Districts. Retrieved from <http://www.window.state.tx.us/taxinfo/proptax/agadvboard/index.html>

Travis Central Appraisal District (January 2007). Open-space/Wildlife Management Agricultural Qualification Guidelines and Definitions. Retrieved from <http://www.traviscad.org/pdf/agmanual.pdf>

United States Department of Agriculture. (2007). Census of Agriculture: State and County Profiles: Texas [data file]. Retrieved from http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Texas/index.asp

Walker, P. & Walsh, L. (2009). Growing Good Things to Eat in Texas. College Station: Texas A&M University Press.

More Information

Fambrough, J. (2010) Ag-use Exemption: Fact or Fiction?. A Reprint from Tierra Grande, the Real Estate Center Journal Law, No. 1361. recenter.tamu.edu/pdf/1361.pdf

Texas Comptroller of Public Accounts: Agriculture & Timberland Appraisal

www.window.state.tx.us/taxinfo/proptax/agtimbr.html

Travis Central Appraisal District: Open-space/Wildlife Management Agricultural Qualification Guidelines and Definitions.

www.traviscad.org/pdf/agmanual.pdf

References and Resources

- Abi-Nader, J., Ayson, A., Harris, K. (2009). *Whole Measures for Community Food Systems: Value-based Planning and Evaluation*. Retrieved November 1, 2010 from Community Food Security Coalition: <http://www.foodsecurity.org/pub/WholeMeasuresCFS-web.pdf>.
- Abi-Nader, J. (2010). *The Activities and Impacts of Community Food Projects*. Portland: Community Food Security Coalition.
- Alkon, A.H. (2009). Breaking the Food Chains: An Investigation of Food Justice Activism. *Sociological Inquiry*, 79(3): 289–305.
- Allen, P. (1999). Reweaving the Food Security Safety Net: Mediating Entitlement and Entrepreneurship. *Agriculture and Human Values*, 16: 117-129.
- Andersen, M. (2008). Rights-based food systems and the goals of food systems reform. *Agriculture and Human Values*, 25, 593-608.
- Basic Needs Coalition of Central Texas. (2007). *Poverty Fact Sheet*. Retrieved May 1, 2009, from Basic Needs Coalition of Central Texas: http://www.caction.org/basicneeds/issue_areas/PovertyFactSheet_2007.pdf
- Bernstein, R. (2009). *Raleigh and Austin are Fastest-Growing Metro Areas*. Retrieved May 1, 2009, from US Census Bureau Newsroom: <http://www.census.gov/newsroom/releases/archives/population/cb09-45.html>
- Born, B. and Purcell, M. (2006). Avoiding the Local Trap: Scale and Food Systems in Planning Research. *Journal of Planning Education and Research*. 26: 195-207.
- Breyer, R.M. (2003, May 7). Owners of \$250 Billion in Property Benefit from Exemptions, Loopholes Amid School Crisis. *Austin American-Statesman*. Retrieved from <http://www.statesman.com/specialreports/content/specialreports/schoolfinance/0507exemptions.html>.
- Campbell, M. C. (2004). Building a Common Table: The Role for Planning in Community Food Systems. *Journal of Planning Education and Research*, 23: 341-355.
- Chung C, Myers J. (1999). Do the poor pay more for food? An analysis of grocery store availability and food price disparities. *Journal of Consumer Affairs*, 33, 276 –96.
- Constance, D.H., Choi, J.Y. and Lyke-Ho-Gland, H. (2008). Conventionalizations, Bifurcation, and Quality of Life: Certified and Non-certified Organic Farmers in Texas. *Southern Rural Sociology*, 23(1): 208-234.
- DuPuis, E.M. and Goodman, D. (2005). Should we go “home” to eat: toward a reflexive politics of localism. *Journal of Rural Studies*, 21: 359-371.
- Dunkley, B., Helling, A., & Sawicki, D. S. (2004). Accessibility Versus Scale: Examining the Tradeoffs in Grocery Stores. *Journal of Planning Education and Research*, 23: 387-401.
- Eisenhauer, E. (2001). In Poor Health: Supermarket Redlining and Urban Nutrition. *GeoJournal*, 53: 125-133.
- Eisinger, P. K. (1998). *Toward an End to Hunger in America*. Washington, DC: Brookings Institution Press.
- Fambrough, J. (2010) Ag-use Exemption: Fact or Fiction?. A Reprint from *Tierra Grande, the Real Estate Center Journal Law*, No. 1361. Retrieved from: recenter.tamu.edu/pdf/1361.pdf.
- Feldstein, L. Jacobus, R. and Burton Laurison, H. (2007). Economic Development and Redevelopment: A toolkit for building healthy, vibrant communities. Retrieved November 1, 2009 from *Public Health Law and Policy*: <http://www.phpnet.org/sites/phpnet.org/files/EcDevToolkit.pdf>.
- Fitzgerald, K. (1995). *Access Denied: An Analysis of Problems Facing East Austin Residents in Their Attempts to Obtain Affordable, Nutritious Food*. Austin: Sustainable Food Center.
- Flynn, E. (2010). From Gate to Plate: Making Meat in Central Texas. Retrieved March 1, 2011 from *Edible Austin*: <http://www.edibleaustin.com/content/editorial/editorial/562?task=view>.
- Ford, P. B. & Dziewaltowski, D. A. (2008) Disparities in obesity prevalence

References and Resources

- due to variation in the retail food environment: three testable hypotheses. *Nutrition Review*, 66 (4): 216-228.
- Frank, P. & Robinson, R. (2005). *Single Family Taxable Value, Percent Chance: 2000-2005*. Retrieved on March 1, 2011 from the City of Austin Department of Planning: http://www.ci.austin.tx.us/demographics/downloads/sf_tax_perc.pdf.
- Glanz, K., Sallis, J.F., Saelens, B.E., & Frank, L.D. (2005). Healthy nutrition environments: concepts and measures. *American Journal of Health Promotion*, 19, 330-333. Gottlieb, R., & Fisher, A. (1996). Community Food Security and Environmental Justice: Searching for a Common Discourse. *Agriculture and Human Values*, 3(3): 23-32.
- Guthman, J. (2008). Bringing Good Food to Others: Investigating the Subjects of Alternative Food Practice. *Cultural Geographies*, 15: 431-447.
- Guthman, J., Morris, A. W., & Allen, P. (2006). Squaring Farm Security and Food Security in Two Types of Alternative Food Institutions. *Rural Sociology*, 71 (4): 662-684.
- Haering, S.A. and Syed, S.B. (2009). *Community Food Security in United States Cities: A Survey of Relevant Scientific Literature*. Retrieved March 1, 2011 from John Hopkins Center for a Livable Future: http://www.jhsph.edu/bin/s/c/FS_Literature%20Booklet.pdf.
- Hagert, C. A. (2007). *The Family Budget Estimator: What It Really Takes to Get By In Texas*. Austin: Center for Public Policy Priorities.
- Hamm, M., & Bellows, A. (n.d.). *What is Community Food Security?* Retrieved August 22, 2009, from Community Food Security Coalition: http://www.foodsecurity.org/views_cfs_faq.html
- Hassanein, N. (2003). Practicing Food Democracy: A Pragmatic Politics of Transformation. *Journal of Rural Studies*, 19: 77-86.
- Hendrickson, D., Smith, C., & Eikenberry, N. (2006). Fruit and Vegetable Access in Four Low-Income Food Deserts Communities in Minnesota. *Agriculture and Human Values*, 23: 371-383.
- Herzfeld, M., & McManus, A. (2007). In Search of a Method to Assess the Availability, Quality and Price of Vegetables and Fruit. *Nutrition and Dietetics*, 64: 248-253.
- Hodgson, K. Caton Campbell, M. and Bailkey, M. (2010). *Urban agriculture : growing healthy, sustainable places*. Chicago: American Planning Association.
- Inagami S, Cohen DA, Finch BK, Asch SM. (2006). You are where you shop: grocery store locations, weight, and neighborhoods. *American Journal of Preventative Medicine*, 31(1), 10-7.
- Jensen, Helen H. (2002). Food Insecurity and the Food Stamp Program. *American Journal of Agricultural Economics*, 84(5): 1215-1228.
- Johnston, J. Biro, A. and MaKendrick, N. (2009). Lost in the Supermarket: The Corporate-Organic Foodscape and the Struggle for Food Democracy. *Antipode*, 41(3): 509-532.
- Kloppenburger, J.J., Hendrickson, J., & Stevenson, G. (1996). Coming in to the Foodshed. *Agriculture and Human Values*, 13(3): 33-42.
- Kumar, S., Quinn, S.C., Kriska, A.M. & Thomas, S.B. (2011) "Food is directed to the area": African Americans' perceptions of the neighborhood nutrition environment in Pittsburgh. *Health & Place*, 17, 370-378.
- Larson, N. I., Story, M. T., & Nelson, M. C. (2009). Neighborhood environments: Disparities in access to healthy foods in the U.S. *Journal of Preventative Medicine*, 36(1), 74-81.
- Leibtag, E.S. and Kaufman, P.K. (2003). Exploring Food Purchase Behavior of Low-Income Households: How do They Economize? *Current Issues in Economics of Food Markets*, 747-07: 1-8.
- Leibtag, E. & Volpe, R. (2011). *Food CPI and Expenditures: CPI for Food Forecasters*. Retrieved March 1, 2011 from USDA Economic Research Service Briefing Rooms: www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/cpiforecasts.htm.
- Leibtag, E. & Volpe, R. (2011). *Food Price Outlook, 2011*. Retrieved March 1, 2011 from USDA Economic Research Service Briefing Rooms: <http://www.ers.usda.gov/briefing/cpifoodandexpenditures/>

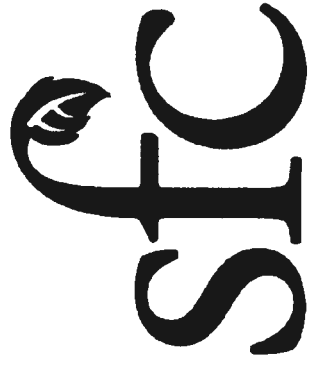
References and Resources

- consumerpriceindex.htm.
- Long, J. (2011). Entering the New Conversational Marketplace: Narratives of Sustainability and the Success of Farm Direct Markets. *Food, Culture and Society*, 14 (1): 49-68.
- Mabli, J., Cohen, R., Potter, F., & Zhao, Z. (2010). *Hunger in America 2010: Local Report Prepared for The Capital Area Food Banks of Texas, Inc.* Retrieved March 1, 2011 from Hunger in America 2010: Central Texas Report: <http://cafbtx.convio.net/site/DocServer/4408.pdf?docID=601>
- Manor Messenger. (2010, March 4). *City Concludes Grocery Survey: Everyone Wants a Grocery*. The Manor Messenger, 13 (2): p.1.
- McCullum, C., Pelletier, D., Barr, D., Wilkins, J., & Habicht, J.-P. (2004). Mechanisms of Power Within a Community-Based Food Security Planning Process. *Health Education and Behavior*, 31(2): 206-222.
- Morland K, Wing S, Diez Roux A, Poole C. (2002). Neighborhood characteristics associated with the location of food stores and food service places. *American Journal of Preventative Medicine*, 22, 23–9.
- Pothukuchi, K. (2005). Attracting Supermarkets to Inner-City Neighborhoods: Economic Development Outside the Box. *Economic Development Quarterly*, 19: 232-244.
- Powell, LM, Slater, S., Mirtcheva, D, Bao, Y., & Chaloupka, Fl. (2007). Food store availability and neighborhood characteristics in the United States. *Preventive Medicine*, 44, 189–195.
- Principles of Healthy, Sustainable Food System. (2010, June). Retrieved April 20, 2011, from American Planning Association: <http://www.planning.org/nationalcenters/health/pdf/HealthySustainableFoodSystemsPrinciples.pdf>
- Shaffer A. (2002). *The persistence of L.A.'s grocery gap: the need for a new food policy and approach to market development*. Center for Food and Justice, Urban and Environmental Policy Institute (UEPI), Occidental College. www.departments.oxxy.edu/uepi/publications/the_persistence_of.htm (accessed April 20, 2011).
- Sloane D, Diamount A, Lewis L, et al. (2003). Improving the nutritional resource environment for healthy living through community-based participatory research. *Journal of General Internal Medicine*, 18, 568 –75.
- State Property Tax Board. (March 1990). The Agricultural Appraisal Advisory Board: Information for Appraisal Districts. Retrieved from <http://www.window.state.tx.us/taxinfo/proptax/agadvboard/index.html>
- Texas Food Bank Network (2009). *Central Texas SNAP (Food Stamp) Enrollment*. Retrieved March 1, 2011 from Capital Area Food Bank of Texas: <http://www.austinfoodbank.org/hunger-is-unacceptable/central-texas-snap-enrollment.html>.
- Tiffany, G., Windhager, S., & Venhaus, H. (2005). *Conservation Development in Texas: a Primer for Government Officials, Developers and Land Planners*. Retrieved March 1, 2011 from Lady Bird Johnson Wildflower Center: http://www.wildflower.org/consdev/cd_whitepaper.pdf
- Travis Central Appraisal District (January 2007). *Open-space/Wildlife Management Agricultural Qualification Guidelines and Definitions*. Retrieved from <http://www.traviscad.org/pdf/agmanual.pdf>
- Travis County Health and Human Services & Veterans Service Research and Planning Division. (2011). *2010 Community Impact Report Part I: Community Condition Highlights*. Retrieved March 1, 2011, from Travis County Health & Human Services: http://www.co.travis.tx.us/health_human_services/research_planning/publications/cir/cir_2010_pt_1/full_report.pdf
- United States Department of Agriculture. (2007). Census of Agriculture: State and County Profiles: Texas [data file]. Retrieved from http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Texas/index.asp.
- Ver Ploeg, M. (2009). *Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Their Consequences*.

References and Resources

- Retrieved September 1, 2009 from U.S. Department of Agriculture, Economic Research Service: <http://www.ers.usda.gov/Publications/AP/AP036/>.
- Walker, P. & Walsh, L. (2009). *Growing Good Things to Eat in Texas*. College Station: Texas A&M University Press.
- Wekerle, G. R. (2004). Food Justice Movements: Policy, Planning, and Networks. *Journal of Planning Education and Research*, 23: 378-386.
- Wermund, B. (2010, November 12). *In Del Valle, lack of grocery store has residents pushing petition: Quest for easier access to fresh, healthy food has been fruitless*. Retrieved December 1, 2010 from Austin American Statesman: <http://www.statesman.com/news/local/in-del-valle-lack-of-grocery-store-has-1043574.html>
- Yeh, M.C., Ickes, S.B., Lowenstein, L.M., Shuval, K., & Ammerman, A.S. (2008). Understanding barriers and facilitators of fruit and vegetable consumption among a diverse multi-ethnic population in the USA. *Health Promotion International*, 23(1), 42-51.
- Zenk SN, Schulz AJ, Israel BA, James SA, Bao S, Wilson ML (2006). Fruit and vegetable access differs by community racial composition and socioeconomic position in Detroit, Michigan. *Ethnicity & Disease*, 16, 275– 80.

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