



FOOD *for* EVERY CHILD

ACCESS AND DEMAND
FOR HEALTHY FOOD
IN THE PASO DEL
NORTE REGION

SPECIAL REPORT

ACKNOWLEDGMENTS

This report was prepared by Miriam Manon, Ana Ramos, Candace Young and Brian Lang of The Food Trust in Philadelphia, Pennsylvania in partnership with Leah Whigham, Alisha Redelfs and Janine Gallinar from the Paso del Norte Institute for Healthy Living. It was published in fall 2017. This report was made possible with support from the Healthy Eating Active Living Initiative of the Paso del Norte Health Foundation.

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EL PASO must address the significant need for healthy food resources in many of its neighborhoods. The Food Trust, in partnership with the Paso del Norte Institute for Healthy Living at The University of Texas El Paso, researched and wrote *Food for Every Child: Access and Demand for Healthy Food in the Paso del Norte Region* to ensure that all children and their families live in communities that have access to healthy and affordable food. This goal can be achieved by encouraging the development and expansion of supermarkets in underserved communities and supporting cross-sector partnerships to build demand for healthy foods through in-store nutrition education, marketing, healthy food incentive programs and participation in the SNAP program.

Despite its growing population, El Paso County has fewer than average supermarkets per capita. Compared to national averages, there are 27 too few supermarkets in the county, and existing grocers are unevenly distributed, with lower-income neighborhoods and *colonias* (neighborhoods) categorically underserved. According to The Food Trust's mapping research, more than 160,000 El Paso County residents, including 52,000 children, are living in these areas with limited supermarket access. This represents about 20% of the county's population. At the same time, food insecurity affects a significant portion of the population, with over 26% of children living in food-insecure homes. Without easy access to supermarkets, residents in underserved areas are either forced to travel long distances to obtain healthy food or turn to mom-and-pop shops, convenience stores or other small food retailers with limited healthy options. Just across the border, residents in Ciudad Juárez also face challenges related to health, food insecurity and food access, made all the more stark by the comparably low wages and lack of safety-net programs such as SNAP and WIC.

Studies show that residents of communities without a local grocery store suffer from disproportionately high rates of obesity, diabetes and other diet-related health problems. In El Paso, 67% of residents are either overweight or obese.¹ In contrast, when people live in a community with access to a full range of healthy foods, they tend to eat more servings of fruits and vegetables and are more likely to maintain a healthy weight.² Leading public health experts, including the Institute of Medicine and the Centers for Disease Control and Prevention, recommend investing in supermarkets that sell high-quality, healthy and affordable foods in underserved communities as part of a comprehensive strategy to combat obesity.

That said, just increasing access to nutritious, affordable food in communities with high rates of diet-related disease does not guarantee a reduction in the incidence of the disease. But if barriers to fresh food access can be removed, people in these communities can more easily maintain a healthy diet. Building demand and awareness for healthy food through in-store marketing and nutrition education can also increase consumption of healthy foods. Increasing SNAP enrollment and developing a healthy food incentive program can increase consumer purchasing power. Several of these initiatives, such as healthy food incentive coupons, nutrition education and expanded

More than 160,000 El Paso County residents, including 52,000 children, live in lower-income communities with limited supermarket access.

food pantries, can also provide a stronger safety net and increase the purchasing power of low-income families in Juárez.

Section One of this report maps out the many lower-income areas in El Paso County with poor supermarket access and a high incidence of diet-related deaths, and summarizes the results of a community survey examining resident shopping patterns and perceptions of their food environment.

Section Two discusses the impact of the U.S.-Mexico border and shares findings from a series of focus groups on healthy food access and stakeholder interviews in Juárez. It concludes with recommendations for areas of further exploration to create a stronger safety net and increase the purchasing power of low-income families.

Section Three recommends a comprehensive approach to addressing healthy food access in El Paso including three key strategies: 1) creating a Healthy Food Financing Initiative to incentivize healthy food retail development in communities of need; 2) increasing enrollment in the SNAP program and developing a healthy food incentive program; and 3) expanding in-store nutrition education and marketing campaigns at existing stores. These recommendations were developed through a series of stakeholder interviews and facilitated discussion at the El Paso Food Summit. In cities and states throughout the country, similar programs have improved healthy food access while creating jobs and strengthening the economic well-being of communities.

A young child with curly hair is looking up and to the left, standing in a grocery store aisle. A shopping basket is visible in the foreground. The entire image has an orange tint.

SECTION ONE: THE NEED FOR HEALTHY FOOD ACCESS IN EL PASO

El Paso is one of the nation's fastest-growing metropolitan areas, yet it has fewer supermarkets per capita than most major cities.

This shortage of supermarkets means that residents, particularly those in lower-income neighborhoods and outlying areas, must travel long distances to purchase food or rely on mom-and-pop shops and convenience stores where fresh fruits and vegetables and other healthy, affordable food options are limited.

A significant body of research demonstrates that access to healthy food can have a measurable impact on people's diet and health outcomes. Both the Institute of Medicine and the Centers for Disease Control and Prevention have independently recommended that increasing the number of healthy food retail markets in lower-income neighborhoods would reduce the rate of obesity in the United States. They also suggest that state and local governments should create incentive programs to attract supermarkets and support healthy changes in existing stores in underserved neighborhoods.^{3,4} Such an investment would have positive economic impacts, as well. Supermarkets create jobs and spark complementary economic development, and bolstering existing stores revitalizes commercial corridors and supports local business owners.

67% of El Paso residents are either overweight or obese.

67% of El Paso residents are either overweight or obese.⁵ Diabetes alone affects more than 12% of residents,⁶ representing an estimated \$543 million in health care costs. Lower-income residents are likely to suffer from obesity and other diet-related health problems at rates significantly higher than those of the population as a whole.⁷ These same families are also likely to have few, if any, places in their communities in which to shop for reasonably priced, nutritious foods.

A recent community survey developed by The Food Trust and the Institute for Healthy Living found that approximately 25% of residents surveyed reported facing challenges finding fresh fruits and vegetables and other healthy products in their neighborhood, and a similar percentage were dissatisfied with the quality and price of fruits and vegetables in their neighborhood.

The region's supermarket deficit could be eased and diet-related health problems decreased by embracing an initiative to invest in supermarket development in underserved communities and supporting complementary strategies, such as in-store nutrition education and incentives to make healthy food more affordable and accessible in lower-income communities.

This section of the report outlines the extent and implications of the supermarket shortage by identifying the gaps in healthy food availability and the relationship among healthy food access, diet-related diseases and neighborhood income levels. This study builds on the excellent work undertaken over the past several years by the Paso del Norte Health Foundation, the Institute for Healthy Living and a variety of local government, private and civic leaders in El Paso.

Methodology

To demonstrate which neighborhoods lack supermarkets, a geographical representation of food access, income and diet-related disease was created by mapping the locations of supermarket sales, income and diet-related mortality data (see *Appendix for more detail*). Retail sales data for supermarkets were obtained from the 2015 Nielsen retail database. The Texas Department of State Health Services provided death records for the County from 2011–2013. Demographic projection data were derived from the U.S. Census Bureau's American Community Survey.

A series of maps was created using Geographic Information Systems computer mapping software.⁸ Weekly sales volume at supermarkets was distributed over a one-mile radius to plot the concentration of sales and then divided by total population density and the average for weekly sales per person to calculate a ratio for weekly supermarket sales per person. The ratios were mapped; ratios greater than 1 represent high sales and ratios less than 1 represent low sales. Median household income was multiplied by the number of households to determine total income density. The term "lower-income" in this report is used to define areas where households have less than median income, except when citing a separate study.

A total of 5,445 diet-related deaths were mapped. "High" diet-related mortality areas are defined as having diet-related death rates greater than the county average, and "low" areas have diet-related death rates less than the county average.

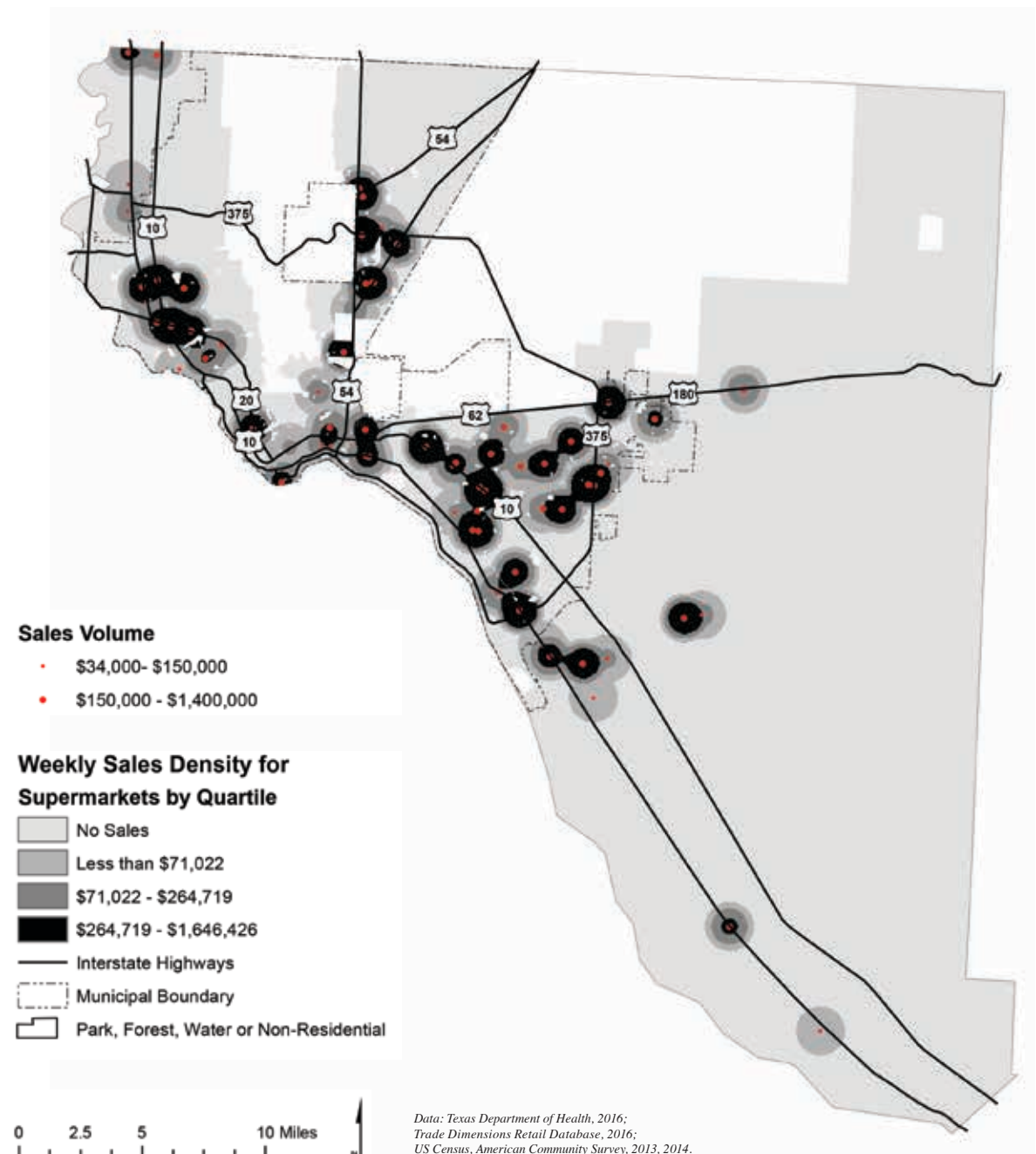
KEY FINDINGS

Access to nutritious food is inequitably distributed in El Paso County. Many people have to travel excessive distances to buy food at a supermarket.

MAP 1: *Weekly Sales Volume for Supermarkets* shows the location of 71 stores in El Paso County and the weekly sales volume at each store. The smaller red circles represent lower weekly sales volume; the larger red circles represent higher weekly sales volume. The gray shading shows how supermarket sales are distributed across each ZIP code. The darkest areas have the highest concentration of supermarket sales, whereas the light areas have the lowest sales, indicating that few or no supermarkets are located there.

Map 1 shows that supermarkets in El Paso County are unevenly distributed. Many people must travel considerable distances to buy food from supermarkets in the neighborhoods where supermarkets are easily accessible. Supermarkets are especially sparse in downtown El Paso and in the *colonias* south of I-10, along the U.S.-Mexico border.

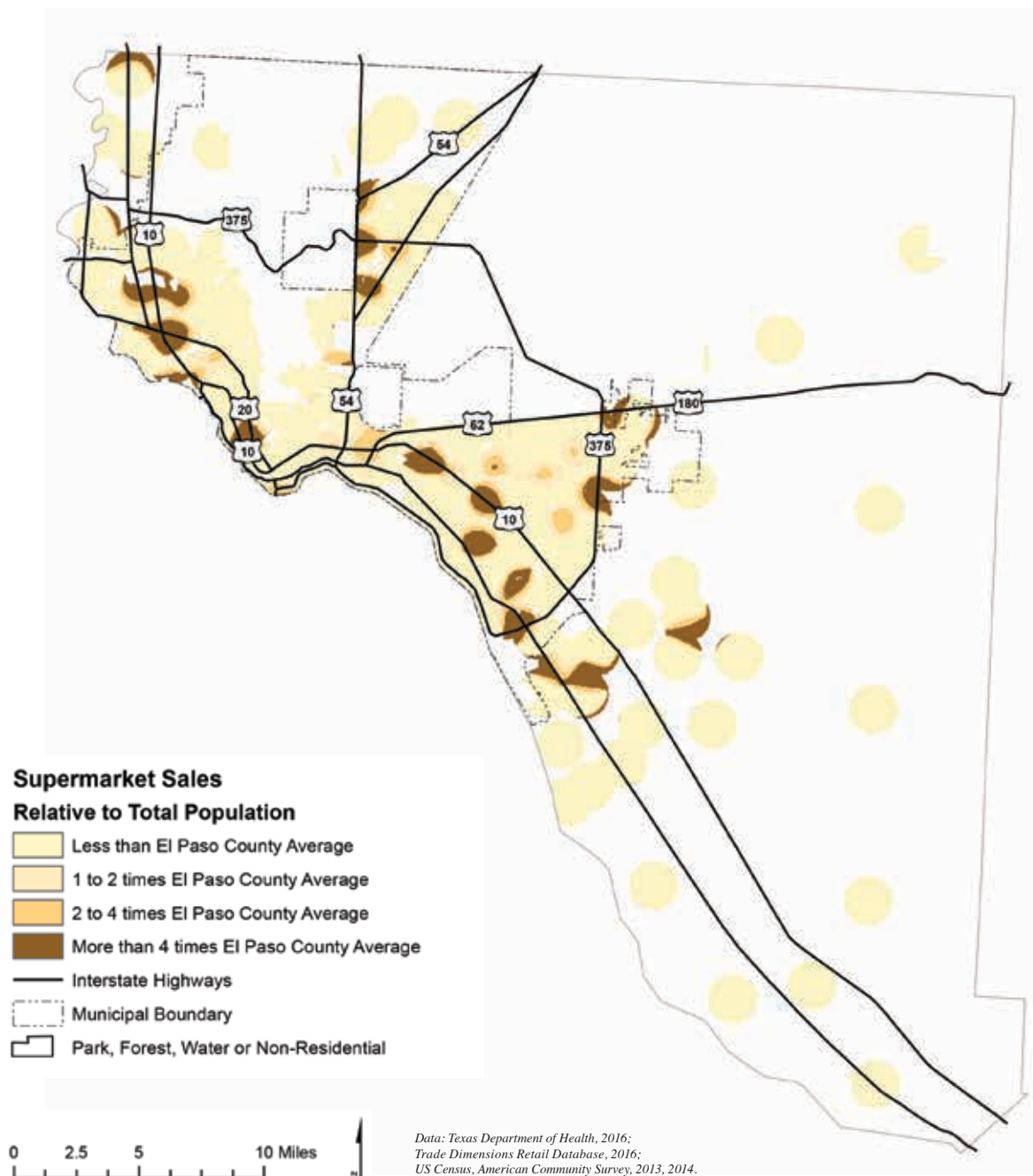
1: *Weekly Sales Volume for Supermarkets*



MAP 2: Supermarket Sales and Total Population shows that the amount of supermarket sales in a particular location does not seem to be associated with the population of that area. Communities with greater than average supermarket sales relative to total population are shown in yellow and brown tones. In these communities, people are either spending more than average in supermarkets, as might be the case in higher-income communities, or more people are buying groceries in these communities than the number of people who live there, indicating that people are traveling from outside the area to shop there.

Supermarkets are especially sparse in downtown El Paso and in the colonias south of I-10, along the U.S.-Mexico border.

2: Supermarket Sales and Total Population



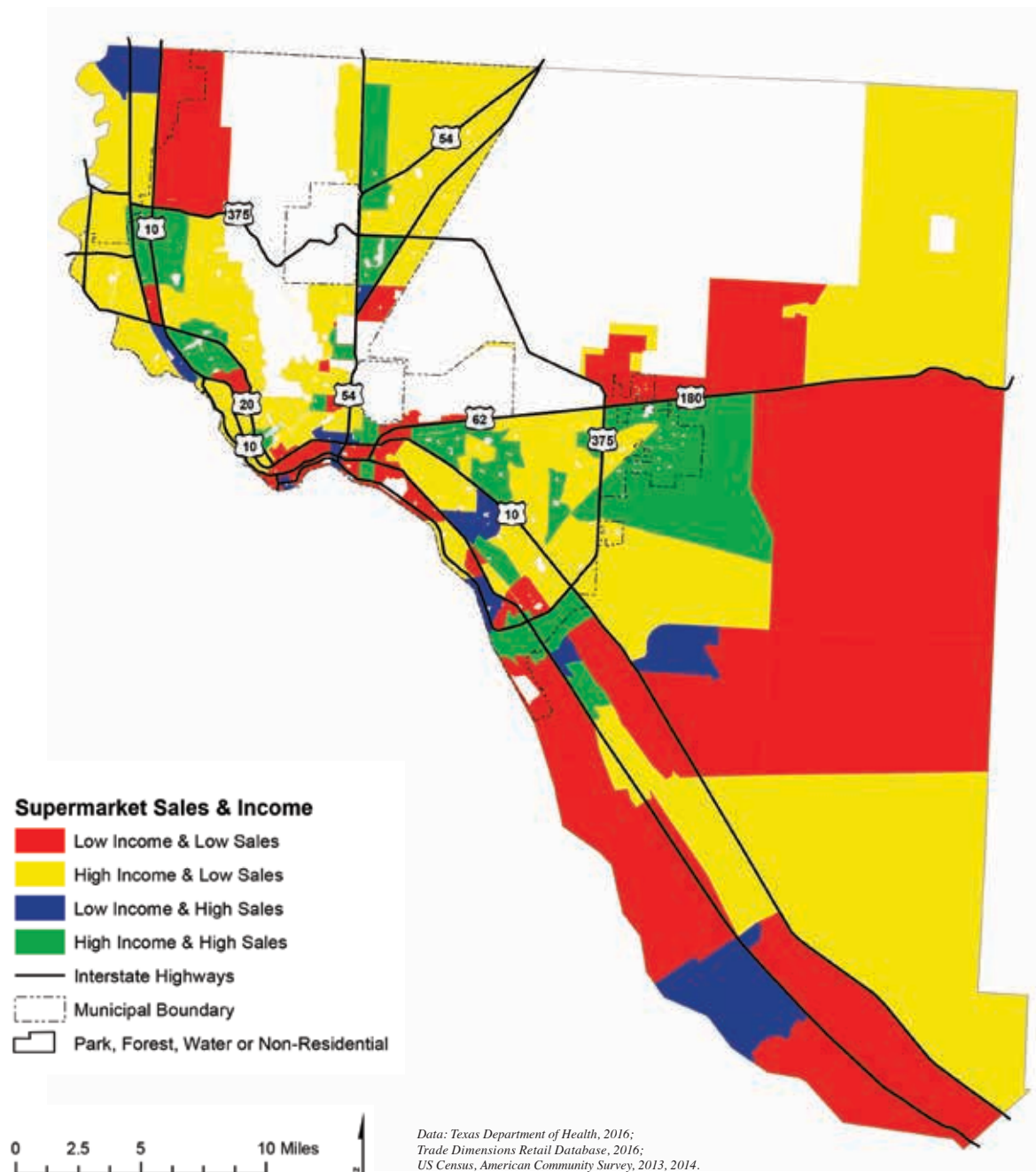
KEY FINDINGS

The uneven distribution of supermarkets in El Paso leaves a disproportionate number of lower-income people without convenient access to nutritious food.

- More than 160,000 El Paso County residents, including over 52,000 children, live in lower-income communities with limited supermarket access.

MAP 3: *Supermarket Sales and Income* shows the distribution of supermarket sales and the distribution of income throughout the city. Higher-income areas with higher supermarket sales have the best access to food resources and are indicated by the green areas of the map. In some lower-income areas, there are communities with higher than average supermarket sales volumes, as highlighted in blue. People in the areas shown in yellow have fewer supermarkets at which to shop in their community. However, since these communities are higher-income, residents often have high car ownership rates and are likely able to afford driving the longer distances to shop. The red areas represent lower-income communities not adequately served by supermarkets.

3: Supermarket Sales and Income

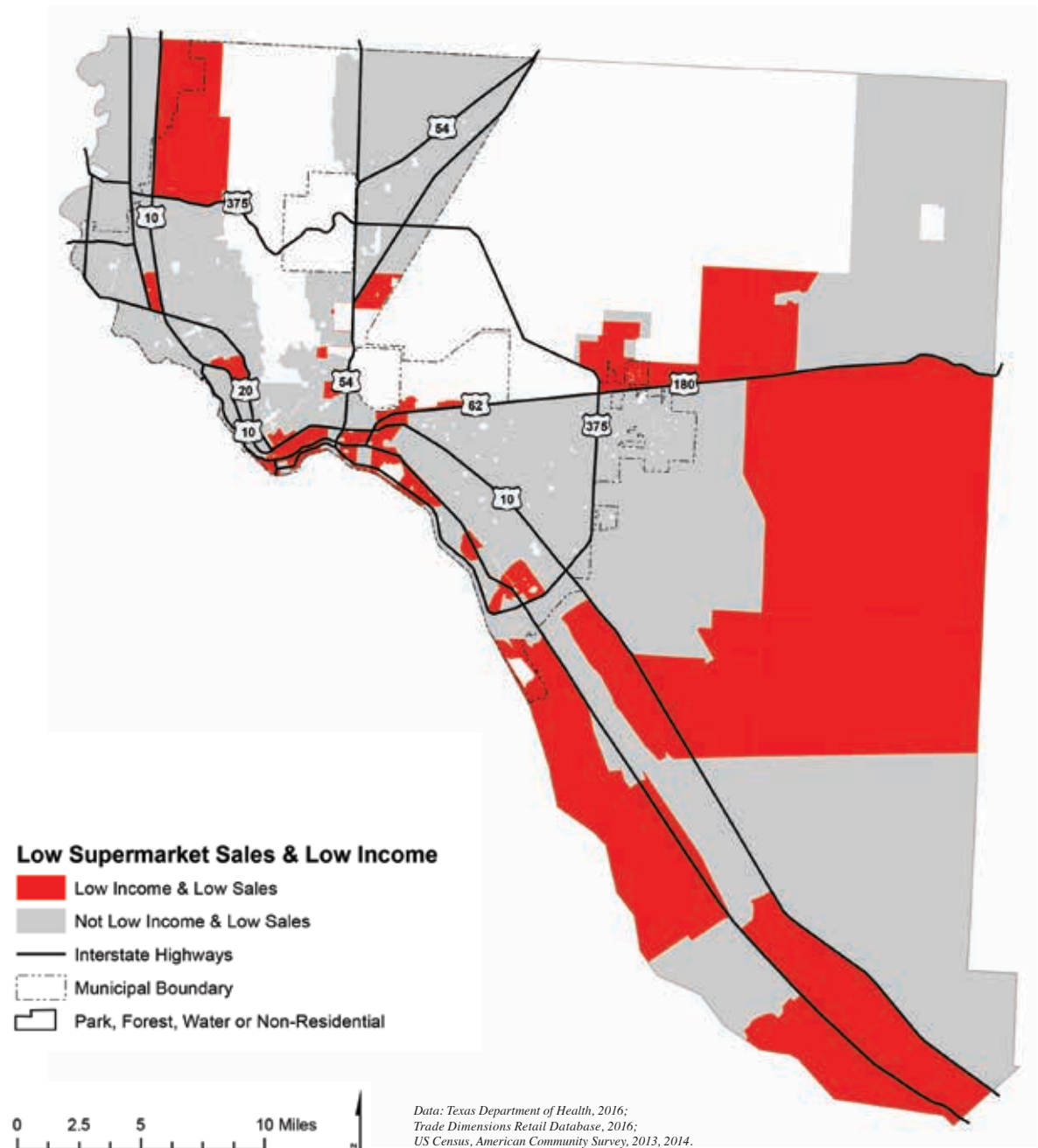


MAP 4: Low Supermarket Sales and Low Income further highlights areas with low supermarket sales because there are few to no supermarkets located there. Since income is also lower in these areas, families may face more difficulty traveling to the areas where supermarkets are concentrated, especially when public transit is not accessible or convenient.

These lower-income areas with insufficient access to supermarkets are heavily concentrated in Downtown El Paso and *colonias* in Socorro, San Elizario and near Horizon, to the East of the city and South of I-10, along the U.S.-Mexico border.

Lower-income areas with insufficient access to supermarkets include Downtown El Paso and colonias to the East of the city and South of I-10, along the U.S.-Mexico border.

4: Low Supermarket Sales and Low Income



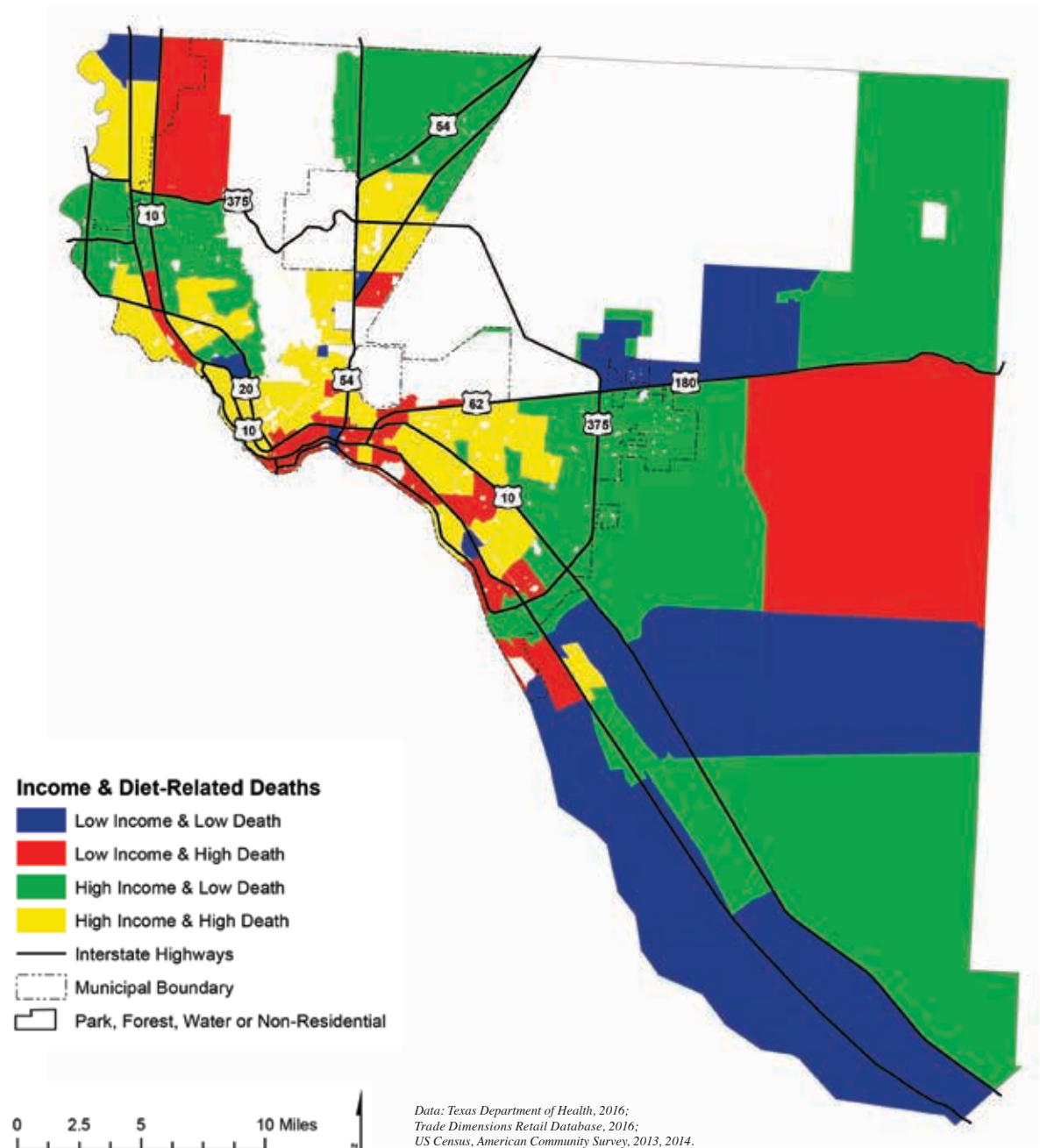
KEY FINDINGS

There is a connection between lack of supermarkets and diet-related disease.

- The Food Trust and PolicyLink, a national research and advocacy organization, conducted a comprehensive literature review which found that studies overwhelmingly indicate that people living in communities without a supermarket suffer from disproportionately high rates of obesity and other diet-related health issues, while people living in communities with a supermarket are more likely to maintain a healthy weight.⁹ One study, for example, found lower body mass index and better health among residents who live near a supermarket.¹⁰ Another study documented that as distance to a supermarket increased in a metropolitan community, obesity rates increased and fruit and vegetable consumption decreased.¹¹

MAP 5: *Income and Diet-Related Deaths* shows diet-related mortality data by income. The red areas indicate a higher than average rate of diet-related deaths occurring in lower-income areas. The yellow areas display higher rates of diet-related deaths occurring in higher-income areas. The blue and green areas have lower rates of diet-related deaths. Diet-related diseases, such as hypertension, obesity and diabetes, create untold suffering and expense in families and communities.

5: *Income and Diet-Related Death*



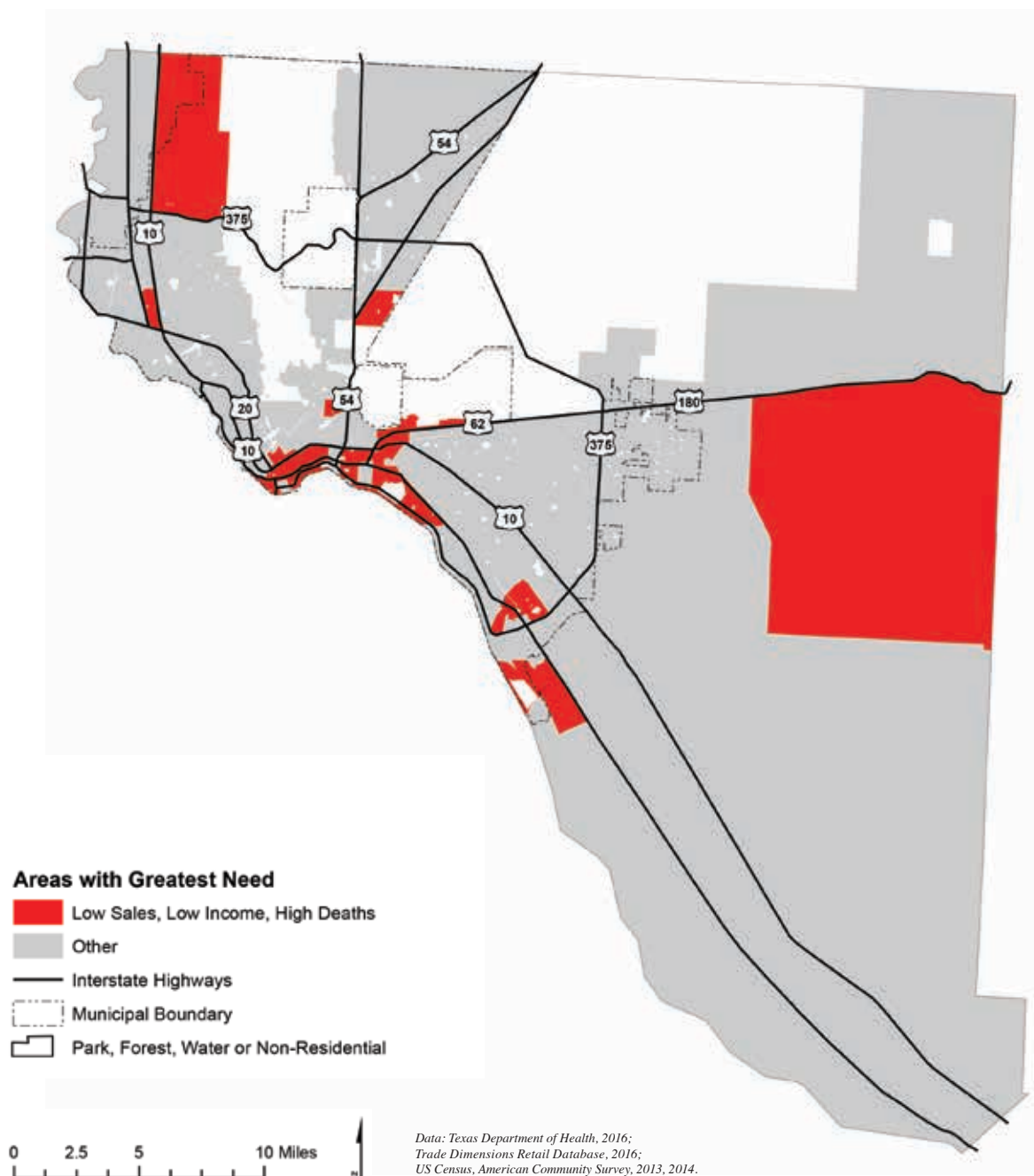
MAP 6: *Areas with Greatest Need* displays lower-income communities where there are low supermarket sales and a high number of deaths due to diet-related disease. These areas have the greatest need for more supermarkets and other healthy food retail outlets.

To provide affordable and nutritious food in these neighborhoods, local government and philanthropic leaders in the El Paso area should encourage new healthy food retail development and support healthy food marketing and incentive programs.

Increasing the availability of nutritious and affordable food in neighborhoods with high rates of diet-related diseases does not guarantee a reduction in their incidence. However, leading public health experts, including the Centers for Disease Control and Prevention and the Institute of Medicine, agree that it is a critical component of the fight against obesity.

Leading public health experts agree that the availability of nutritious and affordable food is a key factor in the development of a healthy community.

6: *Areas with Greatest Need*



EL PASO COMMUNITY RESIDENT SURVEY

In order to better understand the food landscape and food access in El Paso, the Paso del Norte Institute for Healthy Living, in partnership with The Food Trust, collected surveys from residents at a variety of community-wide events in November and December 2016. A total of 246 surveys were collected.

The group surveyed reflected the El Paso population:

- **Race/Ethnicity:** 77% Hispanic, 11% White, 1% African American, 11% Other/Mixed
- **Gender:** 73% female, 27% male
- **Mean age:** 44.6 years
- **Household income:** 48% had income < \$25,000 per year
- **Household size:** 58% had ≥ 2 people, 27% had 2 people, 15% had 1 person
- **SNAP participation:** 21%
- **ZIP codes represented:** 30

Food Sources

The food source overwhelmingly reported by residents was a supermarket, grocery store or supercenter (95%). Smaller percentages of people reported additional food sources such as farmers markets (19%) and discount stores (13%). In deciding where to shop, the most important factor reported was price (31%), followed by location close to home (29%), food quality (27%), food selection (9%) and other factors (4%). See Table 1.

Food Environment & Intake

The majority of survey participants had fruit and vegetable intakes far below recommended levels, with 63% and 55% eating fruits and vegetables less than once per day, respectively. In validated measures of how residents perceive their food environment,¹² an average of 1 in 4 residents had unfavorable responses about access to healthy, high-quality and affordable foods in their neighborhood. See Table 2.

TABLE 1.

Food Sources Reported by El Paso Residents	
Supermarket, Grocery Store, Supercenter	95%
Farmers Market	19%
Fast Food, Takeout, Other Restaurant	16%
Discount Store	13%
Convenience Store	5%
Food Bank, Food Pantry	5%
Church or Community Organization	4%
Other (online, home garden, commissary)	2%
Workplace or School	1%
Community Garden	1%

TABLE 2.

Perceptions of the Food Environment	
"There is a large selection of fresh fruits and vegetables in my neighborhood."	27% Disagree
"It is easy to buy fresh fruits and vegetables in my neighborhood."	26% Disagree
"I live in a place that has less healthy choices than other areas."	26% Agree
"The fresh produce in my neighborhood is of high quality."	25% Disagree
"It is difficult to find food choices for a healthy life."	19% Agree

Food Security

The survey included a validated two-item screen for food insecurity.¹³ 1 in 3 survey participants had experienced some conditions of food insecurity within the past 12 months. While this is higher than the 19% food insecurity rate found in the U.S. Census for El Paso County, some households might not be classified as “food insecure” using the full federal definition yet still experience risk factors associated with food insecurity. El Paso residents experience food insecurity at higher rates than national samples, both according to our survey and the U.S. Census. See Table 3.

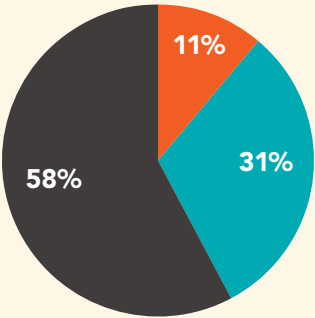
Summary

We collected information from El Paso residents about food sources, perceptions of the food environment, food insecurity and fruits and vegetables. The initial sample of surveys was small (N=246), and residents were surveyed at community events that do not represent a random sample. However, this survey provides a glimpse of the food landscape and food access in El Paso that can inform future efforts. Policy and programmatic initiatives should aim to expand choices for the 1 in 4 El Paso residents who do not have ready access to high-quality, fresh and affordable foods as well as the 1 in 3 residents who face challenges and risks of food insecurity. Comprehensive food access efforts in the Paso del Norte region can improve community nutrition and food security by expanding the availability, accessibility and affordability of healthy choices for low-income residents.

TABLE 3.

Frequency of Food Insecurity Conditions in El Paso Community Survey vs. U.S. Households				
	% Often		% Sometimes	
	El Paso	U.S.	El Paso	U.S.
“Within the past 12 months, (I/we) worried whether (my/our) food would run out before (I/we) got money to buy more.”	10.7	4.4	31.1	12.6
“Within the past 12 months the food (I/we) bought just didn’t last and (I/we) didn’t have money to get more.”	7.8	3.0	30.3	11.0

FIGURE 1.

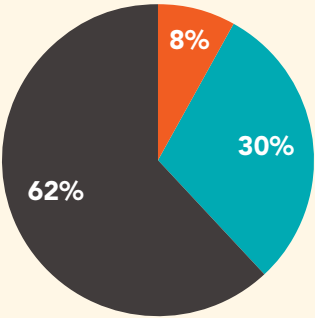


Food Insecurity Item #1

“Within the past 12 months (I/we) worried whether (my/our) food would run out before (I/we) got money to buy more.”

- Often true
- Sometimes true
- Never true

FIGURE 2.



Food Insecurity Item #2

“Within the past 12 months the food (I/we) bought just didn’t last and (I/we) didn’t have money to get more.”

- Often true
- Sometimes true
- Never true



SECTION TWO: BORDER DYNAMICS: HEALTHY FOOD ACCESS IN CIUDAD JUÁREZ

Located along the U.S.-Mexico border, the Paso del Norte region is a unique binational environment that spans across western Texas, southern New Mexico and Ciudad Juárez, Mexico.

With over 2.7 million people living in the region, Paso del Norte is the second largest international metropolitan area on the U.S.-Mexico border. Ciudad Juárez is the largest city in the region with a population of around 1.3 million people and, according to a 2010 report, 75% of the population is poor or vulnerable to poverty.¹⁴ A report on healthy food access in the region would be incomplete without acknowledging the binational relationship and border dynamics of the region. In order to better understand cross-border food dynamics four focus groups were held in two *colonias* in Ciudad Juárez.

A report on poverty in the major cities of Mexico found that 75% of the population in Ciudad Juárez is poor or vulnerable. The study found that 38% live in poverty, 23% are socially vulnerable due to inadequate access to basic needs such as food, housing, education and health services, and an additional 14% are economically vulnerable.¹⁵

Measures of poverty in Mexico differ from those in the United States, and direct comparisons are challenging. In the U.S., household income is used as a basis to determine poverty level. However, in Mexico a multidimensional definition of poverty is used that combines measures of economic well-being and access to basic needs.

The Food Trust conducted extensive research, connected with university professors in Juárez and El Paso, and communicated with staff at the Mexican government's Instituto Nacional de Estadística y Geografía (INEGI). These conversations revealed a lack of available data on income levels, supermarket sales or health outcomes at the local level. Data collected by INEGI is only available at the municipality-level and not at a more granular level, like the census tracts or ZIP codes used to report data in the United States. The Food Trust had anticipated creating maps of the food retail landscape in Juárez, similar to those of El Paso, but unfortunately was unable to obtain the local level data on supermarket sales and health disparities necessary for the project. However, the qualitative data collected during trips to Ciudad Juárez, meetings with local stakeholders and four focus group sessions provided a wealth of data that helped shape this report.

Focus Groups: Food Access in Ciudad Juárez

The Food Trust, in partnership with local nonprofit Centro de Asesoría y Promoción Juvenil (CASA) and the Institute for Healthy Living, held four focus group sessions in two under-resourced colonias in Ciudad Juárez in September 2016.

The goal of the focus groups was to better understand the local food environment, support for accessing healthful foods, border dynamics, health issues and general life in Ciudad Juárez.

- A total of 46 participants attended the focus groups.
- 71% of participants were female.
- On average, participants were long-term residents of Juárez, having lived in the city for an average of 30 years.
- The age of participants varied, with representation across age groups.
- The majority of participants were born in the Mexican state of Chihuahua (59.5%) where Ciudad Juárez is located or in the adjacent state of Durango (28.6%).

Life in Ciudad Juárez

Residents were asked to describe their city and lives in general. Residents responded that Ciudad Juárez is a place that offers many economic opportunities to residents. However, these are mostly through low-paying jobs at one of the abundant factories (maquiladoras). Focus group participants shared that the cost of food and education were major concerns for those working low-paying jobs. Juareneses also described Juárez as a place where hardworking people go to try and get a better life, and several participants mentioned migrating to Juárez from other towns in the state of Chihuahua or other Mexican states, like Durango or Veracruz. Major challenges faced by those participating in the focus groups included drug violence, safety concerns and the high cost of living.

Juárez is a place with a lot of opportunities, especially if you come from another state, because most of the people from Juárez migrate to the United States. In my state of Veracruz, you either go to school or you work, but you can't do both simultaneously. Here, you can do that; it's one of the things that I say about Juárez, that there are a lot of opportunities here.

- FOCUS GROUP PARTICIPANT

Here, you can't even let your children go to school alone because there are people kidnapping our children. There was a girl around here that recently went missing. We have to go to work and leave them sleeping at night. And if our children need to go to school or an internet café, since we don't have internet, we have to go with them. There is a lot of danger here.

- FOCUS GROUP PARTICIPANT

Food Environment and Health

The Food Trust asked participants seven questions regarding the food environment including where food is purchased, how often people are shopping for food and what factors impact their ability to eat a healthy diet in Juárez.

The most common places where participants shopped for food include La Economica Supermarket, the produce market in the center of Juárez; S-MART; Wal-Mart; Soriana Supermarket; and *tiendas*, small independent stores. Most participants purchased food on a weekly basis. However, several participants mentioned only purchasing food when they can afford to do so. Focus group participants thought that the food in their neighborhood was expensive and of lower quality compared to other areas of the city.

Several diet-related diseases emerged during our conversation with Juárez residents. Diabetes was the first health problem mentioned in most focus groups, followed by obesity, breast cancer, allergies, asthma, bronchitis, stress and trauma. A woman who suffered from diabetes described her experience struggling to purchase her medication while maintaining a healthy diet:

If we do purchase healthful foods, it is for our children. If you have diabetes and you try to eat a certain diet, you have to make sacrifices to do so. You have to choose between your diet or your medicine.

- FOCUS GROUP PARTICIPANT

While most people reported cooking meals and eating in their homes every day, time-stressed participants like students or *maquila* workers mentioned eating at the university or eating the meals provided at the *maquiladoras*. Several youth mentioned having to cook for themselves and their siblings while their parents worked, while others mentioned depending on CASA as their only source of a balanced meal.

My mom works, so I have to cook for my siblings while my mom is away. My mom is a single mom who pays our bills and works a lot. I have to help her to cook. I cook at my house or I eat here at CASA, but if I get lazy, I don't eat. My brother and sister eat at home before school and get money from my mom in the morning to eat food at school. Then, they come home and eat what I make or we eat here at CASA.

- FOCUS GROUP PARTICIPANT

My daughter eats her lunch here before going to school. She gets to eat a healthy meal.

- FOCUS GROUP PARTICIPANT

Food insecurity was a major concern for most participants of the focus groups. Difficulty affording healthy foods is a challenge for low-income residents on both sides of the border. However, it is exacerbated in Juárez due to the lack of reliable safety net programs like those available in the U.S. For instance, Mexico does not have a national program equivalent to SNAP or WIC nor is there a well-developed network of food banks or emergency food providers. Several food assistance programs were mentioned, but each had challenges for the participants. For example, certain churches have food pantries only available to members of their congregations who tithe 10% of their incomes to the churches. Government programs, such as Prospera, were described as unreliable and often available only during elections. Most focus group participants mentioned having to stretch their paychecks and meals as much as possible.

If I don't have money to purchase food and I'm out of food, what do I do? Well, I deal with it. I put more water in my beans so that they last us longer. There are no government programs that say, "Here you are, you're hungry, here's food." That only happens when we're in an election cycle.

- FOCUS GROUP PARTICIPANT

Conclusion

The sister cities of El Paso and Juárez are intertwined in many ways, including socially and economically. However, in Ciudad Juárez, 75% of residents are poor or vulnerable to poverty,¹⁶ a rate much higher than El Paso. Based on The Food Trust's visits to Juárez and conversations with residents and nonprofit leaders, The Food Trust recommends several areas for further exploration. The lack of food assistance programs and a reliable government safety net are major concerns for residents and an impediment to consuming a healthy diet. Local leaders and philanthropic organizations should **explore opportunities to increase the safety net**, such as **expansion of local food pantries** that are available to a wider group of people. Organizations can also **support initiatives to increase the purchasing power** of Juárez residents to purchase healthful foods, such as providing **coupons for fresh fruits and vegetables**, along with **nutrition education**.

A report on poverty in the major cities of Mexico found that 75% of the population in Ciudad Juárez is poor or vulnerable. The study found that 38% live in poverty, 23% are socially vulnerable due to inadequate access to basic needs such as food, housing, education and health services, and an additional 14% are economically vulnerable.¹⁵



A young child with light-colored hair, wearing a light-colored patterned shirt, is reaching out with their right arm towards a display of produce in a grocery store. The background is filled with various fruits and vegetables, including leafy greens and root vegetables. The entire image has a warm, orange-toned overlay.

SECTION THREE: EL PASO FOOD SUMMIT AND RECOMMENDATIONS

Local government and private sector leaders must address the critical need for more healthy food resources in El Paso and the region.

Access to healthy food retail is a key factor contributing to the health and economic development of communities. As shown in the first section of this report, people living in lower-income areas without access to supermarkets and other healthy food retail suffer from diet-related deaths at a rate higher than that experienced by the population as a whole. A local community survey found that 1 in 4 El Paso residents were dissatisfied with the quality and selection of fruits and vegetables in their neighborhood and faced difficulty finding healthy and affordable food for their families.

In response to this need, the Paso del Norte Health Foundation, Institute for Healthy Living and The Food Trust hosted a Food Summit to better understand the nature of the problem and to hear about how other places in the country have responded to inadequate access to healthy food. At the meeting, there was consensus that through public-private partnerships, we could increase the number of healthy food retail outlets in underserved communities and develop complementary initiatives to increase demand for healthy choices, improving the health of children and families across the region.

The Food Summit brought together a diverse set of stakeholders from the supermarket, public health, economic development and food security sectors to engage in a facilitated dialogue around the connection between healthy food access and health disparities in the region. Following opening remarks from representatives of the Paso del Norte Health Foundation and Institute for Healthy Living, El Paso Assistant Health Director Bruce Parsons reviewed rates of obesity among city residents and how they varied among different demographic groups. Dr. Parsons also discussed the healthcare and economic impact of diet-related disease and called upon meeting participants to play a role in responding to the problem.

Representatives from The Food Trust provided meeting participants with a national perspective on healthy food access issues. Brian Lang shared research on the connections between food access and health and the development of Healthy Food Financing Initiatives nationwide. He also provided an overview of The Food Trust's history and their comprehensive approach to improving healthy food access and increasing demand through education and incentives. Miriam Manon presented the series of maps published in this report and shared survey results documenting El Paso residents' perceptions of their food environment. Ana

Ramos shared detailed information on programmatic strategies that work in partnership with improved healthy food access to improve health, including in-store nutrition education and health screenings, marketing campaigns and coupons for fruits and vegetables.

A series of additional stakeholders shared local perspectives on the issue: Jessica Herrera from the City of El Paso's Economic Development Department shared the city's attempts to improve access to healthy food through incentivizing grocery store development in new locations with low interest loans and tax incentives. Krysten Aguillar from La Semilla in Las Cruces discussed her organization's work to improve healthy food access in Las Cruces and the potential for expansion of their mobile market into El Paso.

Following the series of presentations, stakeholders engaged in a robust discussion about the possibility of developing comparable initiatives and expanding existing efforts in El Paso and the region. Participants noted the unique dynamics of retailing in El Paso, where residents frequently travel between the U.S. and Mexico for their food shopping needs. As the conversation developed, participants expressed interest in continued work on three main efforts:

- 1. Increase participation in the SNAP program** through innovative strategies, and explore opportunities to launch an incentive program to make healthy choices more affordable for SNAP participants.
- 2. Develop partnerships with food retailers** to conduct nutrition education, health screenings and SNAP outreach at grocery stores in high-need areas.
- 3. Increase access to healthy and local food** through the development of a Healthy Food Financing Initiative that could provide grants and loans to grocers in underserved communities.

El Paso Food Summit

PARTICIPANTS

Access Allergy-Teaching Kitchen
Affiliated Foods
American Heart Association
Center for Inter-American and Border Studies (CIBS)
City of El Paso Eat Well Program
Colonias Program at Texas A&M University
El Paso Community Foundation
El Paso County Economic Development
El Paso Department of Economic and
International Development
El Paso Department of Public Health
El Paso Office of Resilience and Sustainability
El Pasoans Fighting Hunger
EP Foods
Food City Supermarket
Kelly Memorial Food Pantry
La Semilla Food Center
Lowe's/Food King
NMSU, Marketing Department
Paso Del Norte Health Foundation
Paso Del Norte Institute for Healthy Living
Texas A&M Agrilife Extension Expanded Food
and Nutrition Program
The Food Trust
The Hospitals of Providence
U.S.-México Border Health Commission
United Way of El Paso County
Walmart

CASE STUDY

In 2014, USDA launched the Food Insecurity Nutrition Incentive (FINI) program, which has supported research, piloting and expansion of SNAP incentive programs. Through FINI, organizations including The Food Trust and Michigan-based Fair Food Network have greatly expanded their Double Up Food Bucks programs in farmers markets and grocery stores across the country. Wholesome Wave, based in Connecticut, is bringing SNAP incentives to health care, allowing physicians to “prescribe” vouchers for fruits and vegetables to low-income patients. More locally, New Mexico’s Farmers Marketing Association received a four-year \$2.1-million award to expand its Double Up Food Bucks program statewide. In addition to the federal funds, New Mexico provided an additional \$390,300 annually, marking the first time a state legislature provided matching funds for such incentives. Funds will be used to expand Double Up to nearly 90 sites across the state, including 50 farmers markets, grocery stores, farm stands, mobile markets and community supported agriculture outlets. In 2016, Double Up is projected to impact 25,000 SNAP shoppers and 800 small farms, stimulating an average of \$1.2 million annually in local food sales.²⁰

1. Increase participation in the SNAP program through innovative strategies, and explore opportunities to launch an incentive program to make healthy choices more affordable for SNAP participants.

Participation in the SNAP program in El Paso is low among income-eligible people, leaving an estimated \$91 million in federal resources unused each year. For comparison, while the rate of participation among income-eligible people in El Paso County, an estimated 76%, is above the overall rate for the state of Texas (66%),¹⁷ both are well below the nationwide rate of 83%. In some cities and states, participation rates can be 95% or more. A variety of issues contribute to the low rates of SNAP enrollment in El Paso and Texas, including the program’s lengthy application process

and complex eligibility guidelines, as well as stigma and cultural barriers. Those problems can be addressed through expanded outreach to potential participants, and through reforms at the state level to simplify the application process. Participation in SNAP has been shown to have positive health impacts on children and families. Furthermore, an increase in SNAP enrollment not only benefits food insecure families but also has a direct impact on local grocers and the overall economy. When people do not participate in SNAP, the county loses valuable resources that translate into demand for grocery stores.

In addition to increasing the overall rate of participation in the SNAP program, providing incentives for fruit and vegetable purchases through programs like Double Up Food Bucks can make healthy food more affordable for SNAP shoppers. Incentive programs typically award SNAP clients coupons for fruits and vegetables when they use their SNAP benefits to purchase produce at a participating retail outlet. For example, with The Food Trust’s Philly Food Bucks program, shoppers earn \$2 in coupons that can be used toward fresh fruits and vegetables for every \$5 in SNAP purchases at participating farmers markets and supermarkets. While these programs are relatively new, having started at farmers markets in Maryland, New York, Philadelphia and Detroit, preliminary research has shown that they can lead people to eat greater quantities and varieties of fruits and vegetables.¹⁸ They can also increase SNAP utilization at farmers markets and participating supermarkets.¹⁹

The 2014 Farm Bill included \$100 million in competitive grants to support such work, but El Paso has not yet benefited from the program. As incentive programs continue to expand, they appear to be a promising strategy to address affordability barriers to a better diet and build demand for healthy food.

2. Develop partnerships with food retailers to conduct nutrition education, health screenings and SNAP outreach at grocery stores in high-need areas.

Grocery stores and supermarkets in low-income communities can serve as the foundation for a range of public health interventions. Community partners can work with grocers to conduct nutrition education sessions that teach people about the importance of healthy eating with healthcare providers to provide shoppers timely information about their health, all the while in a setting where shoppers can purchase the foods they need for a healthier diet. Additionally, anti-hunger groups can work with grocery stores to conduct outreach for the SNAP program to ensure that potential program participants know that they are eligible.

Marketing campaigns promoting healthy foods can also have a positive impact on people's diet. One noteworthy example already underway in the region is a partnership between local grocer Lowe's Pay N Save and marketing researchers at New Mexico State University that encourages produce sales at stores in lower-income communities throughout the region. Pilot studies using simple "nudges" such as floor mats

pointing to the produce department with prescriptive messages (e.g., "follow the green arrow for health") have shown statistically significant increases in the proportion of produce purchased compared to other food. Additionally, by placing prepackaged, grab-n-go produce items near check-out aisles, statistically significant purchase increases in these items were found.



CASE STUDY

The Food Trust's Heart Smarts program, launched in 2010, is one such example of combining food access with nutrition education as well as health and social services for retail customers. The goal of the program is to empower lower-income individuals to improve their health and reduce their risk of diet-related diseases by meeting them where they are. Staff provide nutrition education to customers on a weekly or monthly basis using a curriculum specifically

designed for the retail setting. Lessons are short, often lasting only three to five minutes, and cover topics such as fruits and vegetables, whole grains, sodium and healthy snacks. Educators often see up to 40 participants in a two-hour session. Heart Smarts programming includes free food tastings during every lesson, using simple recipes such as bean salsa, fruit smoothies and whole wheat pizza. All recipes are designed to be nutritious, affordable, easy to make and use ingredients found in the store. Heart Smarts programming can also include shopping tours, coupon incentives to purchase healthy foods, and free health screenings, provided by a local health care professional.

The Food Trust has partnered with multiple hospitals as well as local health departments to conduct health screenings at participating stores in Pennsylvania and New Jersey. Participants are screened for blood pressure; given weight checks; and are offered lifestyle counseling, referrals and resources. Healthcare partners have noted that the Heart Smarts model allows them to reach participants who do not have a primary care doctor and may not otherwise seek out preventive services.

The team is continuing to test new ideas, including the creation of a data tool that will extrapolate “statistically significant increases” into practical significance of these findings (e.g., fruit and vegetable cup equivalent increases) as well as a pilot study focused on WIC fruit and vegetable purchases at stores throughout the Paso del Norte Region.

3. Increase access to healthy and local food through the development of a Healthy Food Financing Initiative that could provide grants and loans to grocers in underserved communities.

Grocery store operators and other healthy food retailers looking to build or expand their facilities in low-income communities often face challenges obtaining adequate financing for their businesses. Available credit might be offered at higher rates than retailers can afford or on unfavorable terms. Developing a grocery store in an underserved community involves high start-up costs; grocers may face challenges related to land remediation and assembly, as well as workforce development. Communities across the country have recognized the need to increase access to supermarkets and other healthy food retail in underserved communities, resulting in the creation of a variety of state, local and regional Healthy Food Financing programs

(see chart, page 21). These programs are modeled after the successful Pennsylvania Fresh Food Financing Initiative which supported nearly 90 projects across the state, representing more than 5,000 jobs created or retained and improved access to healthy foods for over 400,000 residents. Healthy Food Financing Initiatives across the country have a number of common features, which include:

Public-Private Partnership Structure: Seed funding from the government is provided to a Community Development Financial Institution (CDFI), which partners with a Food Access Organization to co-administer the program. In emerging cases, a philanthropic foundation has provided seed money to initiate the fund, and in some instances, government agencies have played a more direct role in program management

Attracting Additional Funding: Government and/or foundation seed funding is then leveraged with additional dollars from banks, foundations and other sources. Financing programs across the country range in size from \$14 million to over \$100 million, with initial seed funding of \$2 million to \$30 million in public or philanthropic funds. A recently-launched program in Ohio was able to leverage nearly \$10 million from just \$2 million in state resources. CDFIs are particularly adept at pooling together multiple layers of funding and therefore can be critical partners in administering healthy food financing programs.

Flexible Uses of Grants and Loans: Grant funds are essential to closing deals and deploying loan funds, even with below-market rates and flexible terms and conditions for loans. Generally, grants are paired with traditional loans as well as an equity contribution from the retailer or developer. Allowable uses for grants and loans could include: predevelopment costs, such as market studies; land assembly, including demolition and environmental remediation; infrastructure improvements, including installing energy-efficient lighting or refrigeration equipment, real estate and construction costs; and workforce training and development.

Funding a Range of Retail Formats: Allowing for a wide range of eligible project types takes into consideration the unique needs of a variety of communities: urban, rural and suburban. Recognizing that one size does not fit all, flexibility in what type of healthy food retail can qualify for healthy food financing funds is a key element of a successful HFFI program. Project types eligible for funding could include:

- New full-service supermarkets or grocery stores
- The upgrade, expansion or preservation of an existing grocery store
- Small and alternative food retailers, such as farmers markets, mobile markets, co-ops and others
- Local produce distribution enterprises, such as food hubs

As the meeting concluded, participants expressed interest in continued work across all three areas of work, and several commented that the meeting set the stage for collaborations that could lead to new proposals and projects. Many participants noted that they appreciated attending a meeting that brought together unusual stakeholders who do not typically work together. Following the meeting, many participants attended the first meeting of the Institute for Healthy Living's HEAL Alliance, where conversations continued to further develop regional partnerships that would

build demand for and increase access to affordable and nutritious food. Preliminary reports indicated that the city and county were exploring incentive policies to support the development of new grocery stores in underserved communities. And ongoing conversations with local grocers indicated that several are exploring innovative healthy food marketing programs and using their stores as a setting for outreach to potential SNAP participants.

CASE STUDY

In 2004, Pennsylvania became the first state in the country to establish a statewide financing program to encourage supermarket development in underserved communities. The Fresh Food Financing Initiative was designed to accommodate the diverse needs of large chain supermarkets, family-owned grocery stores, farmers markets and other healthy food retailers, whether located in urban centers, small towns or rural communities. Seeded with \$30 million from the state's Department of Community and Economic Development, and administered by the Reinvestment Fund (a CDFI) and The Food Trust, the program supported the development or expansion of almost 90 stores, serving more than 400,000 people statewide. The program now serves as a model for similar initiatives since created in numerous states and cities, including New York, New Jersey, Illinois, California, Colorado, Ohio, New Orleans and a regional initiative in the mid-South.



CONCLUSION

The lack of access to healthy, affordable food is a problem in many neighborhoods and *colonias* in El Paso County, especially in lower-income areas where the incidence of obesity is relatively high.

In Ciudad Juárez, residents also face similar challenges related to health, food insecurity and food access, exacerbated by the comparably low wages earned at local *maquiladoras* and the lack of a reliable government safety net and emergency food system. Philanthropic organizations and local leaders can support initiatives to increase the purchasing power of residents to purchase healthy foods. Healthy food coupon incentive programs can be one strategy to address the issue. Leaders should also explore opportunities to increase the safety net, such as expansion of local food pantries.

Without supermarkets in many communities, residents must travel long distances to purchase food or shop at convenience stores with higher prices and lower-quality food. Diets that rely on food from convenience stores are often higher in sugar and fat, contributing to the incidence of diet-related disease. A series of maps presented in this report demonstrates that many lower-income neighborhoods in the El Paso area have both poor supermarket access and a high incidence of diet-related deaths. According to The Food Trust's mapping research, more than 160,000 El Paso County residents, including 52,000 children, live in these lower-income communities with limited supermarket access. A local community survey also found that 1 in 4 El Paso residents were dissatisfied by the quality, price and selection of fruits and vegetables in their neighborhood.

The consequences are stark for people of lower incomes. People who live in lower-income areas without access to high-quality, healthy, affordable foods suffer from diet-related deaths at a rate higher than that experienced by the population as a whole.²¹ In response to this issue, local grocers, public health and economic development officials, anti-hunger advocates and other civic leaders convened for a Food Summit to examine the needs in the region and discuss a range of solutions to improve healthy food access for local residents. At the meeting, there was broad consensus that the public and philanthropic sector should invest in a comprehensive strategy which includes investing in increased supermarket and healthy food retail development in underserved areas, as well as complementary strategies such as nutrition education, SNAP outreach and incentives to make healthy food more affordable for lower-income shoppers. Such investments would have positive economic impacts, as well: Supermarkets bring jobs to communities that need them the most and increasing the purchasing power of low-income shoppers through incentives and SNAP enrollment brings additional dollars into the community, benefiting local families and businesses. Working together, we can improve the health and economic well-being of the region and ensure that all kids grow up healthy.

HEALTHY FOOD FINANCING PROGRAMS ACROSS THE COUNTRY

LOCATION	NAME OF PROGRAM	PROGRAM PARTNERS	FUNDING SOURCES	TYPES OF FINANCING
CA	California FreshWorks Fund www.cafreshworks.com	The California Endowment, Capital Impact Partners, Emerging Markets and others	The California Endowment and other private funding: \$264 million raised from a variety of private investors. Additionally, Capital Impact Partners has leveraged funding for CA projects since 2011 through the national Healthy Food Financing Initiative.	Loans: Up to \$8 million. Grants: Up to \$50,000.
CO	Colorado Fresh Food Financing Fund www.chfainfo.com/CO4F	The Colorado Health Foundation, Colorado Enterprise Fund and Progressive Urban Management Associates	Seeded with a \$7.1 million investment from the Colorado Health Foundation. Additionally, the Colorado Enterprise Fund has leveraged funding for CO projects since 2012 through the national Healthy Food Financing Initiative.	Loans: Up to \$1.5 million per project. Grants: May not exceed \$100,000 per project, except in extraordinary, high-impact cases.
IL	Illinois Fresh Food Fund www.iff.org/illinois-food	IL Department of Commerce and Economic Opportunity and IFF	Seeded with a \$10 million grant from the IL Department of Commerce and Economic Opportunity. The fund is designed to invest approximately \$30 million over the next three to four years.	Loans: Typical loans range from \$250,000 to \$1 million. Grants: Grants are only available to those who are also applying for a loan. The grant amount can be up to 10% of the loan amount, not to exceed \$100,000.
LA	New Orleans Fresh Food Retailer Initiative www.hope-ec.org/index.php/new-orleans-fresh-food-retailer-initiative	City of New Orleans, Hope Enterprise Corporation (HOPE) and The Food Trust	Federal and private funding. Seeded with \$7 million in Disaster Community Development Block Grant funds. Matched at least 1:1 by HOPE and other investment sources. Additionally, HOPE has leveraged funding for New Orleans projects since 2014 through the national Healthy Food Financing Initiative.	Loans: CDBG loans not to exceed \$1 million. Forgivable Loans: Up to \$500,000 or 20% of total financing needs.
NJ	New Jersey Food Access Initiative www.trfund.com/wp-content/uploads/2013/05/NJ_HealthyFoodRetailInitiativeBrochure_2013.pdf	NJ Economic Development Authority, The Reinvestment Fund (TRF) and the Robert Wood Johnson Foundation	To date, financial partners include: NJ Economic Development Authority (\$4 million), Living Cities (\$2 million credit) and the Robert Wood Johnson Foundation (\$10 million Program Related Investment). Additionally, TRF has leveraged funding for NJ projects since 2011 through the national Healthy Food Financing Initiative.	Loans: Range in size from \$200,000 to \$4.5 million or larger for New Markets Tax Credit transactions. Grants: Range in size from \$5,000 to \$125,000. Recoverable Grants: Early-stage financing with no-interest loans, typically repaid by construction financing.
NY	New York Healthy Food & Healthy Communities Fund www.liifund.org/products/community-capital/capital-for-healthy-food/new-york-healthy-food-healthy-communities-fund	NY Empire State Development Corporation, Low Income Investment Fund (LIIF), The Reinvestment Fund (TRF) and The Food Trust	Seeded with \$10 million from the state's Empire State Development Corporation. Matched with a \$20 million commitment from The Goldman Sachs Group, Inc. Additionally, LIIF has leveraged funding for NY projects since 2011 through the national Healthy Food Financing Initiative.	Loans: Range in size from \$250,000 to \$5 million or larger for New Markets Tax Credit transactions. Grants: Range in size from \$5,000 to \$500,000 for capital grants and \$5,000 to \$200,000 for predevelopment grants.
OH	Cincinnati Fresh Food Retail Financing Fund www.closingthehealthgap.org/fresh-food-fund	Center for Closing the Health Gap and Cincinnati Development Fund	Up to \$15 million over three years from the city. Funds appropriated by the city's Focus 52 allotted funds, sponsored by Cincinnati's Department of Trade and Development. Additionally, The Cincinnati Development Fund has leveraged funding for Cincinnati projects since 2012 through the national Healthy Food Financing Initiative.	Loans: Pending Grants: Pending
PA	Pennsylvania Fresh Food Financing Initiative www.trfund.com/pennsylvania-fresh-food-financing-initiative	PA Department of Community and Economic Development, The Food Trust, The Reinvestment Fund (TRF) and the Urban Affairs Coalition	Seeded with \$10 million in year one and an additional \$20 million over the next two years from the state's Department of Community and Economic Development. Matched with \$146 million in additional public and private investment. Additionally, TRF has leveraged funding for PA projects since 2011 through the national Healthy Food Financing Initiative.	Loans: Typical loans ranged in size from \$200,000 to \$3.5 million or larger for New Markets Tax Credit transactions. Grants: Up to \$250,000 per store and \$750,000 in total for one operator. Extraordinary grants of up to \$1 million were made available for projects with high potential for serving areas of extreme need.
Federal	Healthy Food Financing Initiative www.healthyfoodaccess.org/funding/healthy-food-financing-funds	US Departments of Treasury, Agriculture, and Health and Human Services	Since 2011, HFFI has distributed more than \$140 million to over 70 community development entities across the country.	Financing packages vary. Financing packages vary. HFFI dollars are given to Community Development Financial Institutions (CDFIs) and Community Development Corporations (CDCs) to provide one-time grants and loans to projects in their regions.

GIS Methodology

All tabular data was prepared in MS Excel and mapped in ArcGIS 10.2.1 by ESRI. The coordinate system and projection used during mapping and analysis were the North American Datum 1983 and Texas State Plane North Central. Analysis was at the U.S. Census Bureau's tract level of geography using vector polygons from the 2014 ESRI Data & Maps shapefiles. El Paso County analysis used interpolated rasters and density grids from tract centroids.

Demographic data from the U.S. Census Bureau website (www.census.gov) from the 2010–2014 5-Year American Community Survey was used.

SUPERMARKET SALES

Supermarkets in the 2015 Nielsen TDLinx database were included in the analysis of sales. For the purposes of this study, the definition of a supermarket is a store that had an SIC code of 541105 and was identified by Nielsen as a "conventional, limited assortment or natural supermarket," a "superette" or a "supercenter" with over \$2 million in annual sales. There were 71 supermarkets in El Paso County, with an aggregate weekly sales volume of \$29,459,000.

All supermarkets were plotted using the latitude and longitude coordinates for each record and then classified into two categories; between \$34,000 and \$150,000, and more than \$150,000 in weekly sales.

Weekly sales volume was further transformed from a series of points to a continuous raster grid representing the sales density per square mile using the Kernel Density function with a one mile radius in Spatial Analyst. This raster was then classified into quartiles shown in *Map 1: Weekly Sales Volume for Supermarkets*.

POPULATION

Population data estimates for El Paso County by tract were retrieved from the U.S. Census Bureau's 2010–2014 American Community Survey (total of 823,862 people). Density of total population was calculated from the Census tract centroid points using Kernel Density with a search radius of one mile, or 5,280 feet. Geographies with no population were removed from the analysis, as indicated on the maps.

SALES AND POPULATION DENSITY

The density of weekly sales volume raster was divided by the density of total population raster. The result was then divided by \$35.76 (\$29,459,000 total sales / 823,862 total population) to create an odds ratio raster for weekly supermarket sales per person for El Paso County.

An odds ratio of 1 is equivalent to the countywide rate. Anything below 1 is below the countywide rate. An odds ratio of 2 means the rate is twice the countywide rate. This is used for *Map 2: Supermarket Sales and Population Density*. The result was reclassified to yield two distinct values, those below and those above the countywide sales rate.

INCOME

El Paso County median income per person is \$15,983. Local per capita income by tract was divided by this number to produce an income odds ratio. The odds ratio, assigned to the Census tract centroid, was used to interpolate a grid, which was then reclassified to yield two distinct values, those below and those above the countywide income rate.

SALES AND INCOME

The Sales and Income binary rasters were combined, resulting in four distinct values which correspond to the four possible combinations of high and low odds ratios, used to classify *Map 3: Supermarket Sales and Income* and *Map 4: Low Supermarket Sales and Low Income*.

DIET-RELATED DEATHS

The Texas Department of State Health Services provided mortality data for the specified list of ICD-10 codes for the years 2011–2013. A total of 5,445 deaths were summarized based upon the Census tract number, resulting in a count of diet-related deaths per Census tract.

DIET-RELATED DEATHS AND POPULATION

The number of diet-related deaths attributed to each tract was divided by the total population of that tract. This result was divided by the countywide ratio of diet-related deaths to total population ($5,455/823,862 = 0.006609117$, or 66 diet-related deaths per 10,000 people) to calculate a death odds ratio. The odds ratio, assigned to the Census tract centroid, was used to interpolate a grid, which was then reclassified to yield two distinct values, those below and those above the countywide death rate.

INCOME AND DIET-RELATED DEATHS

The two binary rasters of Deaths and Income odds ratios were combined through addition to calculate a new raster. This resulted in four distinct values which correspond to the four possible combinations of high and low deaths and income, used to classify *Map 5: Income and Diet-Related Deaths*.

DIET-RELATED DEATHS, SALES AND INCOME

To combine all three variables for El Paso County, the two reclassified rasters of 1) Deaths and 2) Low Supermarket Sales and Low Income were combined to create a new raster layer. These results were reclassified to only retain one value: Low Supermarket Sales, Low Income and High Deaths, and were mapped to produce *Map 6: Areas with Greatest Need*.

Endnotes

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Ensuring That Everyone Has Access To Affordable, Nutritious Food

The Food Trust, a nonprofit founded in Philadelphia in 1992, strives to make healthy food available to all. Research has shown that lack of access to healthy food has a profound impact on food choices and, therefore, a profound impact on health.

For 25 years, The Food Trust has worked with neighborhoods, schools, grocers, farmers and policymakers to develop a comprehensive approach to improving the health of America's children. The Food Trust's innovative initiatives integrate nutrition education with increased availability of affordable, healthy foods.

This approach has been shown to reduce the incidence of childhood overweight; a study in the journal *Pediatrics* found that the agency's School Nutrition Policy Initiative resulted in a 50 percent reduction in the incidence of overweight among Philadelphia school children.

The Food Trust is recognized as a regional and national leader in the prevention of childhood obesity and other diet-related diseases for this and other notable initiatives to increase food access in underserved neighborhoods, including the Healthy Corner Store Initiative and the Pennsylvania Fresh Food Financing Initiative, a public/private partnership which has sparked the development of 90 fresh-food retail projects across Pennsylvania.

The Centers for Disease Control and Prevention honored the Fresh Food Financing Initiative in its Showcase of Innovative Policy and Environmental Strategies for Obesity Prevention and Control, and the program was named one of the Top 15 Innovations in American Government by Harvard University.

For more information or to order additional copies of this report, visit thefoodtrust.org or contact The Food Trust.

For 25 years, The Food Trust has worked with neighborhoods, schools, grocers, farmers and policymakers to develop a comprehensive approach to improving the health of America's children.

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