



Food Security & Food Systems in Sioux Falls, SD

DECEMBER 2018

AUGUSTANA RESEARCH INSTITUTE FOR SIOUX FALLS THRIVE

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Suzanne Smith, Principal Investigator
Augustana Research Institute

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Executive Summary

Nationally in 2016, 12.3% of households experienced food insecurity, and 4.9% experienced very low food security. National figures are important indicators of the state of food security, but they offer limited insight into the local experience of food security or how households access community food assets. This report documents retail and charitable food assets available in the Sioux Falls community—particularly those serving school-age children and their families—and it describes the ways in which Sioux Falls residents experience food insecurity.

Food Systems in Sioux Falls

The first section of this report describes the programs operating in Sioux Falls to provide support to families and children facing food insecurity. In Sioux Falls, many families facing food insecurity rely on federally funded programs, including the school breakfast and lunch program and the Supplemental Nutrition Assistance Program (SNAP). However, these programs may not meet all of a family's food needs. Federally funded summer feeding programs help fill in gaps for school-age children, and charitable programs such as the BackPack Program help ensure students have enough food over the weekend when they are out of school. In addition, charitable pantries, giveaways, and meals provide food for food insecure families.

These programs aim to provide families with sufficient food to alleviate hunger. But fully addressing food security actually encompasses two competing goals: ensuring low-income families have *enough* food, while lowering the risk of obesity and other negative health outcomes by encouraging families to eat healthy foods in healthy amounts. Food security support programs in Sioux Falls—along with the retail food landscape—structure incentives that influence individual choices about food and nutrition. Stakeholders reviewing action on food security should consider individual decision-making processes alongside food systems to ask how the systems that stakeholders control can be leveraged to nudge individual choices about food toward healthy choices.

Geographical Barriers: Mapping Food Assets and Food Deserts

In addition to documenting available food assets, this report uses GIS to identify food deserts in Sioux Falls; explore access to a variety of retail and charitable food assets (taking into account vehicle access, eligibility restrictions, and hours of availability); show the location of food assets in relation to schools and neighborhood income levels; investigate the relationship between receipt of SNAP and the location of retail and charitable food assets; and explore nutrition and the types of foods available across the city from retail and charitable food assets.

In Sioux Falls, **three food desert areas** are underserved by both retail and charitable food assets:

- The north central part of the city east of the airport, including the Froehlich Addition and Norton Tracks neighborhoods. Though only a small portion of this area is zoned residential, it is still home to nearly 5,000 people, most of whom live far from both retail and charitable food assets. This area has among the highest rates of households receiving SNAP and of visits to the Feeding South Dakota food pantry.
- The Hayward area, bordered on the south by Skunk Creek and the north by Madison Street and between I-29 and Ellis Road, but especially the area north of 12th Street. Though this area has small grocery stores and relatively high rates of vehicle ownership compared to other food desert areas, it also has very limited access to supermarkets or charitable food assets.

- The Empire Mall area around 49th Street and Louise Avenue has low access to charitable food assets and, despite being a bustling commercial hub, is home to a high proportion of low-income families and families without vehicle access.

Smaller, volunteer-based organizations that provided feedback during data collection said that **capacity is limited by volunteers**, not food. Among those smaller organizations, those that said they were at capacity thought they could serve more if they had more volunteers or more distribution sites. A few organizations that had recently shut down food distribution programs said they did not have enough volunteers to sustain the programs.

Financial and Behavioral Barriers: Experiences of Food Insecurity

Food insecurity may be the result of the inability to access sufficient, healthful foods, whether because of income or distance. Conceptually, food deserts measure both financial and geographic barriers to accessing food, and empirical research has found that people who live in food deserts eat less healthful foods. However, research suggests that food access and diet quality are more sensitive to financial and behavioral barriers than distance. Evidence shows that low-income consumers are savvy shoppers who travel for lower prices, who, like higher-income consumers, generally shop for groceries at supermarkets, and who tend to buy nutritionally similar food even when they travel farther.

In order to better understand how people in Sioux Falls experience food insecurity, focus groups were held with people who self-identified as ever having not had enough food or having used a food pantry. When grocery shopping, respondents were intentional and strategic about trying to save money. Nearly all did their primary grocery shopping at supermarkets, but they focused on sales and discount items. For many (but particularly those with cars), affordability was the most important factor in determining where to shop, more important than convenience.

When discussing the price and availability of different food types, **participants were most concerned with getting enough protein**. There was widespread agreement that meat is the hardest part of a meal to budget; though participants saw fruits and vegetables as expensive, too, they focused more on how to ensure their protein intake was adequate. In terms of nutrition from charitable food assets, participants said food pantries and food giveaways tend to have all of the food groups available. According to participants, fruits and vegetables (fresh) and meat (fresh) are harder to find (though canned fruits, vegetables, and meats are widely available), and the most abundant items seem to be junk food, bread, and other carbohydrates.

Most participants vociferously agreed that Sioux Falls is rich in charitable food assets, and they were generally **aware of numerous charitable food assets, but not always the particulars of where, when, or how to access them**. They suggested that calendars and maps of availability would be valuable supplements to existing listings of charitable food assets.

For people who work during the day, **hours of availability** are a barrier to accessing charitable food assets, especially pantries and giveaways, which have limited evening and weekend availability.

Transportation was also seen as a barrier. Though most participants saw transportation as an inconvenience, not an unsurmountable barrier, they pointed out that some households—especially for the elderly, disabled, and those with young children—struggle more. Bus schedules and rules can also present a challenge: buses do not run on Sundays and service ends earlier on Saturdays, plus riders who carry food home on the bus must hold their bags, limiting the amount they can carry.

In short, food deserts matter, but eliminating geographic barriers to healthful food will not do away with financial or behavioral barriers to changing diets. Current research points to the need for a two-pronged approach to addressing food access: Locating grocery stores in food deserts will not matter unless shoppers change their shopping habits, which requires the time, knowledge, and desire to purchase and prepare healthier foods. Likewise, trying to change habits or provide nutrition education will do little where it is too difficult or expensive to access healthful foods.

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1 Food System Snapshot

This section provides a snapshot of the systems in place to serve school-age children or households with school-age children who are facing food insecurity. It begins with an overview of food insecurity among school-age children in the Sioux Falls area, then profiles food programs that primarily serve school-age children: the school breakfast and lunch programs, summer feeding programs, and backpack programs. It also offers an overview of two major nutrition assistance programs, the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplementation Nutrition Program for Women, Infants, and Children (WIC). It concludes by mapping the system of stakeholders in the Sioux Falls community that aim to meet the food security needs of school-age children and their families.

Food Insecurity for Children and Families

Food secure families are those who are able to provide enough food to keep family members healthy. Food insecure families, on the other hand, have trouble providing enough food due to lack of resources, and families with very low food security may skip meals or otherwise disrupt their normal eating patterns because they cannot afford enough food.

Nationally, food security is measured using a standard survey instrument that asks about a family’s eating patterns and ability to afford food. For further information about how food security is measured and national rates of food insecurity, see Section 2: Food Security and Food Access.

National surveys of food security do not have large enough samples to estimate food security rates for counties or cities. However, Feeding America has combined food security surveys with additional demographic information to estimate county-level food insecurity rates. These estimates are provided in an interactive tool and report called Map the Meal Gap. For the most recent Map the Meal Gap report, food insecurity rates are determined using data from the 2001-2016 Current Population Survey on individuals in food insecure households; data from the 2016 American Community Survey on median household incomes, poverty rates, homeownership, and race and ethnic demographics; and 2016 data from the Bureau of Labor Statistics on unemployment rates.

Table 1 and Table 2 summarize Feeding America’s estimates of food insecurity among the general population and among children under 18 in Lincoln and Minnehaha Counties.

Table 1. Food insecurity among the general population in Lincoln and Minnehaha Counties, 2016

County	Population	Food insecurity rate	Estimated number food insecure individuals (rounded)	Food Insecure Individuals Likely Income-Eligible for Federal Nutrition Assistance		
				% below 130% poverty SNAP, WIC, free school meals, CSFP, TEFAP	% between 130% and 185% poverty WIC, reduced price school meals	% above 185% poverty Charitable response
Lincoln	51,396	7.0%	3,620	23%	13%	64%
Minnehaha	182,014	11.0%	20,070	46%	14%	40%

Source: Gundersen, et al. 2018

Table 2. Food insecurity among children under 18 in Lincoln and Minnehaha Counties, 2016

County	Population under 18 years old	Child food insecurity rate	Estimated number food insecure children (rounded)	Food insecure children likely income-eligible for federal nutrition assistance (<185%)	Food insecure children likely not income-eligible for federal nutrition assistance (>185%)
Lincoln	14,943	11.3%	1,690	34%	67%
Minnehaha	45,679	15.1%	6,880	63%	37%

Source: Gundersen, et al. 2018

In both Lincoln and Minnehaha Counties, the rate of food insecurity is higher among children than the general population. In total across the two counties, about 8,570 children (14%) are food insecure. Of those children, about 4,900 (57%) are likely income-eligible for federal nutrition assistance (e.g., free or reduced price school lunch, SNAP, or WIC).

The remainder—about 3,670 children (43%)—likely live in households with incomes above 185% of the federal poverty level, meaning they are income-ineligible for most federal nutrition assistance and must instead rely on charitable resources (e.g., food pantries, giveaways) to meet their food needs.

Food Costs and Food Gaps

To better understand food insecurity, consider the average cost of feeding a family of four, which could range from around \$650 per month to more than twice that (\$1,250), depending on assumptions made.

In January 2018, the USDA estimated the minimum monthly cost to meet the nutritional needs of a family of four with two adults and two school-age children at \$644.50 (USDA 2018). This minimum estimate is based on the USDA’s Thrifty Food Plan and is the basis for determining SNAP allocations, which may not exceed this monthly amount (for more information about SNAP, see the section below, Supplemental Nutrition Assistance Program (SNAP)). The USDA’s Thrifty Food Plan estimate appears to closely match *actual* spending among food insecure families (Coleman-Jensen et al. 2017b). However, critics contend it does not accurately estimate *adequate* spending on food.

Feeding America has proposed an alternative measure of food costs, estimating that a family of four in Minnehaha County would spend \$1,059 per month (\$1,249 in Lincoln County). Whereas the USDA estimate corresponds to spending by food insecure families, the Feeding America estimate is based on actual food spending by food-secure households, a methodology they argue ensures results reflect the cost of a truly adequate diet (i.e., what a family would spend if they were not facing food insecurity) (Gundersen et al. 2018).

Whereas the USDA’s Thrifty Food Plan might be considered a minimally adequate food budget, the Feeding America estimate more accurately reflects food budgets for families who can choose foods without financial constraint. For families to feed themselves with the Thrifty Food Plan budget would require a good deal of discipline and savvy in shopping for and preparing foods. For instance, the plan assumes all meals are prepared and eaten at home, whereas the Feeding America budget includes meals eaten or prepared elsewhere (e.g., restaurants, fast food, carryout). And whereas the Feeding America

budget is modeled off of actual consumption patterns, the Thrifty Food Plan makes adjustments to observed consumption patterns in order to fit within predefined nutritional and budgetary constraints.

Nutrition assistance programs, such as SNAP, assume families can spend 30% of their monthly income on food. Following that assumption, a family of four would need to bring in *at least* between \$26,000 and \$50,000 annually to be able to afford the monthly food costs estimated by the USDA's Thrifty Food Plan and by Feeding America, respectively.¹ The reasonableness of the 30% standard may vary by family. For low-income families, spending on food may trade off with other necessary expenses, including housing, transportation, childcare, and healthcare.

School Breakfast and Lunch Programs

The National School Lunch Program was established by an act of Congress in 1946. Under the program, students from families below 130% of the poverty guidelines are eligible for free meals; students from families below 185% of poverty are eligible for reduced price meals. Income eligibility guidelines are set annually by the USDA based on the federal income poverty guidelines set by the Department of Health and Human Services.²

In the Sioux Falls School District, all schools also provide breakfast. Eligibility for free or reduced price breakfast follows the same guidelines as for lunch. In 2018-19, the cost of full-price school lunch was \$2.75 (elementary) or \$2.95 (secondary). Students eligible for reduced priced meals paid \$0.40. Breakfast cost \$1.85 or \$0.30 for reduced price.

To enroll their children, parents must be 18 or older. They can submit applications online³ or in hard copy to the school office. Hard copies are available in school offices and are also distributed at open houses and in welcome packets to all students. Offices have Spanish applications available and can request applications in other languages as needed. School offices also provide literacy help and assistance in completing forms for those who need it. Applications are reviewed by Child Nutrition Services at the school district's central offices, and a notification letter is sent to parents indicating whether or not the child is eligible for free or reduced price meals.

Families must re-apply each year. However, for the first 30 days of the school year, all students who were approved for free or reduced meals the previous year can receive the same designation. The school district sends reminders and application forms to families who have not returned paperwork for the new school year.

Students who are homeless, runaway, or migrant children, or who receive benefits under SNAP, Temporary Assistance for Needy Families (TANF), or the Food Distribution Program on Indian Reservations (FDPIR) are directly certified for free or reduced price lunch. They qualify automatically once their status has been verified by a school district liaison (for homeless, runaway, or migrant

¹ As a point of comparison, someone working fulltime, year-round at the current South Dakota minimum wage of \$8.85 per hour would earn \$18,408 annually.

² For 2018, the poverty guideline for a family of four is \$25,100. For a family of four, 130% of poverty would be \$32,630, and 185% of poverty would be \$46,435.

³ Online applications are available on the Sioux Falls School District website (<http://www.sf.k12.sd.us/>). To access the application from the district website, click on "Meals Information," then "Free/Reduced Application." Alternatively, the application can be accessed directly at www.school lunchapp.com/ (click "Start Application," then choose state and district).

children) or by the appropriate agency (i.e., South Dakota Department of Social Services for SNAP and TANF).

Additionally, some students receive free meals because they attend schools that participate in the Community Eligibility Program (CEP). CEP allows schools in high poverty areas to provide free meals to all students without requiring applications. The program is intended to improve participation and efficiency. The Sioux Falls School District began participating in 2014-15. CEP schools are approved on four-year cycles. Beginning in fall 2018, the following schools have been approved for CEP: Hawthorne Elementary, Lowell Elementary, Terry Redlin Elementary, Axtel Park Building, and the Elementary Immersion Center at Jane Addams.

Over the last six years, the proportion of students receiving free or reduced price meals in the Sioux Falls School District has stayed fairly steady, fluctuating between 42.6% and 45.2%. The free or reduced meals enrollment rate tends to be higher for younger students, with the elementary rate nearing 50% while the high school rate has stayed just above one-third.

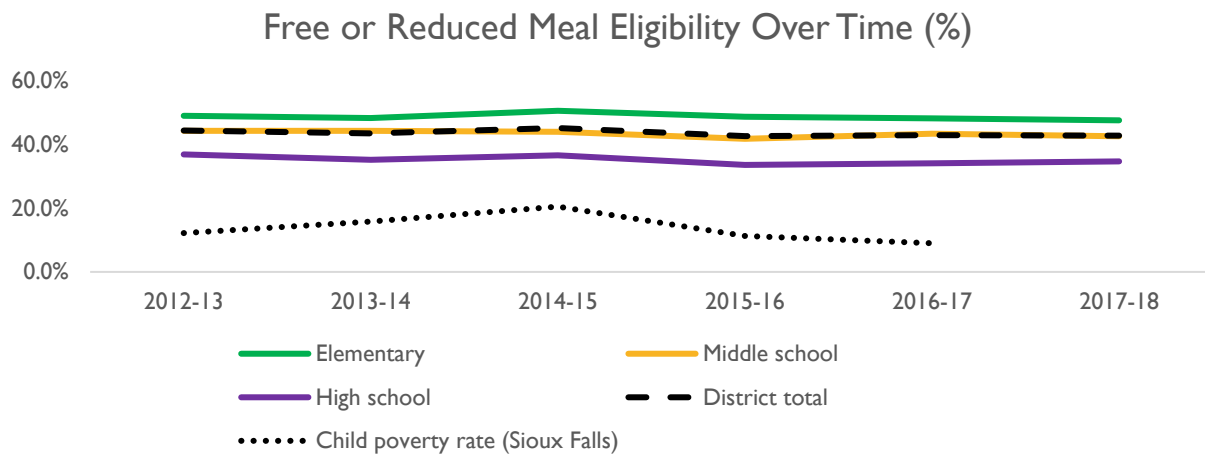


Figure 1. Free or Reduced Meal Eligibility in the Sioux Falls School District, 2012-13 to 2017-18

Table 3. Free or Reduced Meal Eligibility in the Sioux Falls School District, 2012-13 to 2016-17

Elementary	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Fall enrollment	10,933	11,170	11,476	10,567	10,689	11,723
Free or reduced meals eligibility rate	49.0%	48.3%	50.6%	48.7%	48.2%	47.6%
Free or reduced meals enrollment	5,357	5,395	5,807	5,146	5,152	5,580
Middle school						
Fall enrollment	4,769	4,855	4,940	4,995	5,209	5,383
Free or reduced meals eligibility rate	44.3%	44.3%	44.0%	41.8%	43.4%	42.6%
Free or reduced meals enrollment	2,113	2,151	2,174	2,088	2,261	2,293
High school						
Fall enrollment	6,588	6,928	6,576	6,622	6,640	6,723
Free or reduced meals eligibility rate	36.9%	35.2%	36.6%	33.6%	34.1%	34.7%
Free or reduced meals enrollment	2,431	2,439	2,407	2,225	2,264	2,333
District total						
Fall enrollment	22,290	22,952	22,992	22,183	22,538	23,829
Free or reduced meals eligibility rate	44.4%	43.5%	45.2%	42.6%	42.9%	42.8%
Free or reduced meals enrollment	9,901	9,984	10,387	9,459	9,677	10,206

Source: Sioux Falls School District Data Profiles

Summer Feeding Programs

During the summer, when children are not in school, summer feeding programs help fill the gap for students who rely on school breakfast and lunch for food security. Typically, summer feeding programs are supported by the USDA Summer Food Service Program.

In Sioux Falls during the summer of 2018, eight school district buildings and four nonprofit sites provided meals through the Summer Food Service Program: Laura B. Anderson, Cleveland, Garfield, Hawthorne, Hayward, Terry Redlin, and Anne Sullivan Elementary Schools, plus the school district's Food Service Center, as well as Our Savior's Lutheran Church, EmBe Downtown, the VOA Youth Center, and the Boys & Girls Club.

Each of the school-based Summer Food Service Program sites served meals from June 4 until August 3, with lunch served on weekdays from 11:30 a.m. to 12:30 or 1:00 p.m. Three sites (Laura B. Anderson, Hawthorne, and Hayward) also served breakfast from 8:30 – 9:00 a.m. Among the nonprofit sites, the Boys & Girls Club and Our Savior’s Lutheran Church provided meals through August 17, and EmBe Downtown provided meals through August 22, with lunch served from 11:00 or 11:30 a.m. until 12:30 or 1:00 p.m. Both the Boys & Girls Club and EmBe Downtown also served breakfast from 8:00 – 9:00 a.m. The VOA Youth Center served dinner only, beginning at 5:30 p.m. on weekdays during the summer.

For summer of 2018, students finished the 2017-18 school year on June 1 and began the 2018-19 school year on August 23, leaving a minimal gap between the end of school and the beginning of summer feeding programs but a nearly three-week gap between the end of school-based summer feeding programs and the beginning of school. Children and their families could still find meals in August at the nonprofit summer feeding programs hosted by EmBe Downtown, Our Savior’s Lutheran Church, and the Boys & Girls Club.

In general, summer meal sites are free to anyone ages 1 to 18,⁴ and no income verification is required. Adults may also eat, but must pay. The broad eligibility criteria are possible because the sites selected for summer feeding programs serve low-income areas.⁵

Of course, some charitable food providers operate year-round, including during the summer. These providers include the Banquet and the Banquet West, the Nightwatch Canteen, Sallie’s Table at the Salvation Army, meal services of the Union Gospel Mission and Bishop Dudley Hospitality House, and periodic meals offered by churches. These food assets are described in more detail in Section 2: Food Security and Food Access.

Table 4. Summer Food Service Program Details

Location	Address	Dates	Days of Week	Breakfast	Lunch
Laura B. Anderson ES	1600 N. Wayland Ave.	June 4 to August 3	M – F	8:30 – 9:00	11:30 – 1:00
Hawthorne ES	601 N. Spring Ave.	June 4 to August 3	M – F	8:30 – 9:00	11:30 – 1:00
Hayward ES	400 N. Valley View Rd.	June 4 to August 3	M – F	8:30 – 9:00	11:30 – 1:00
Terry Redlin ES	1721 E. Austin St.	June 4 to August 3	M – F	-	11:30 – 12:30
Anne Sullivan ES	3701 E. 3 rd St.	June 4 to August 3	M – F	-	11:30 – 12:30
Cleveland ES	1000 S. Edward Dr.	June 4 to August 3	M – F	-	11:30 – 12:30
Garfield ES	705 S. Roberts Dr.	June 4 to August 3	M – F	-	11:30 – 12:30
Child Nutrition Center	1101 N. Western Ave.	June 4 to August 3	M – F	-	11:30 – 12:30
Boys & Girls Club	700 S. Sneve Ave.	June 4 to August 17	M – F	8:00 – 9:00	11:30 – 12:30
EmBe Downtown	300 W. 11 th St.	June 5 to August 22	M – F	8:00 – 9:00	11:00 – 12:30
Our Savior’s Lutheran Church	909 W. 33 rd St.	June 5 to August 17	M – F	-	11:00 – 1:00
VOA Youth Center	1309 W. 51 st St.	Year-round	M – F	-	5:30 (dinner)

BackPack Programs

Together, school breakfast and lunch programs combined with summer feeding programs help meet students’ nutrition needs year-round. However, both programs operate on weekdays only. Feeding

⁴ The VOA Youth Center serves youth ages 8 to 20 years.

⁵ For more information about the Summer Food Service Program in South Dakota, see <http://doe.sd.gov/cans/sfsp.aspx>

South Dakota’s BackPack Program is designed to fill the hunger gap on weekends. Participating students receive a plastic bag containing easy-to-prepare food at the end of the week, ensuring they have something to eat over the weekend until they have access to breakfast and lunch programs again the next week.

In Sioux Falls, the BackPack Program is open to elementary and middle school students. Registration letters are sent home to parents, who complete and return the form in order to enroll their children. During the school year, students pick up backpacks at school. Currently, 34 schools in the Sioux Falls area participate in the program, including all Sioux Falls School District schools. The program also serves Sioux Falls School District Early Childhood programs for children ages 3 – 5.

To participate in the program, parents are asked to opt-in using a standard registration form, which is sent home at the beginning of the school year. School staff are also able to register children if they know they experience food insecurity and have been unable to contact the parents.

During the summer, backpacks are distributed at summer feeding sites during lunch or the afternoon.

Table 5. Summer BackPack Program Distribution Locations

Location	Address	Dates	Backpack Delivery
Laura B. Anderson ES	1600 N. Wayland Ave.	June 4 to August 3	Thursday during lunch
Hawthorne ES	601 N. Spring Ave.	June 4 to August 3	Thursday during lunch
Hayward ES	400 N. Valley View Rd.	June 4 to August 3	Thursday during lunch
Terry Redlin ES	1721 E. Austin St.	June 4 to August 3	Thursday during lunch
Anne Sullivan ES	3701 E. 3 rd St.	June 4 to August 3	Thursday during lunch
Cleveland ES	1000 S. Edward Dr.	June 4 to August 3	Thursday during lunch
Garfield ES	705 S. Roberts Dr.	June 4 to August 3	Thursday during lunch
Child Nutrition Center	1101 N. Western Ave.	June 4 to August 3	Thursday during lunch
Boys & Girls Club	700 S. Sneve Ave.	June 4 to August 17	Thursday, 2:30 – 3:00
EmBe Downtown	300 W. 11 th St.	June 5 to August 22	Thursday, 12:00 – 12:30
Our Savior’s Lutheran Church	909 W. 33 rd St.	June 5 to August 17	Thursday, 11:00 – 11:45

In FY18, Feeding South Dakota distributed 105,681 backpacks within Sioux Falls and the surrounding area during the school year and an additional 9,473 backpacks during the summer. On average, 3,050 backpacks were distributed each week during the school year, the vast majority (near 90%) in the Sioux Falls School District. Figure 2 shows the number of backpacks distributed each year for the last five years.

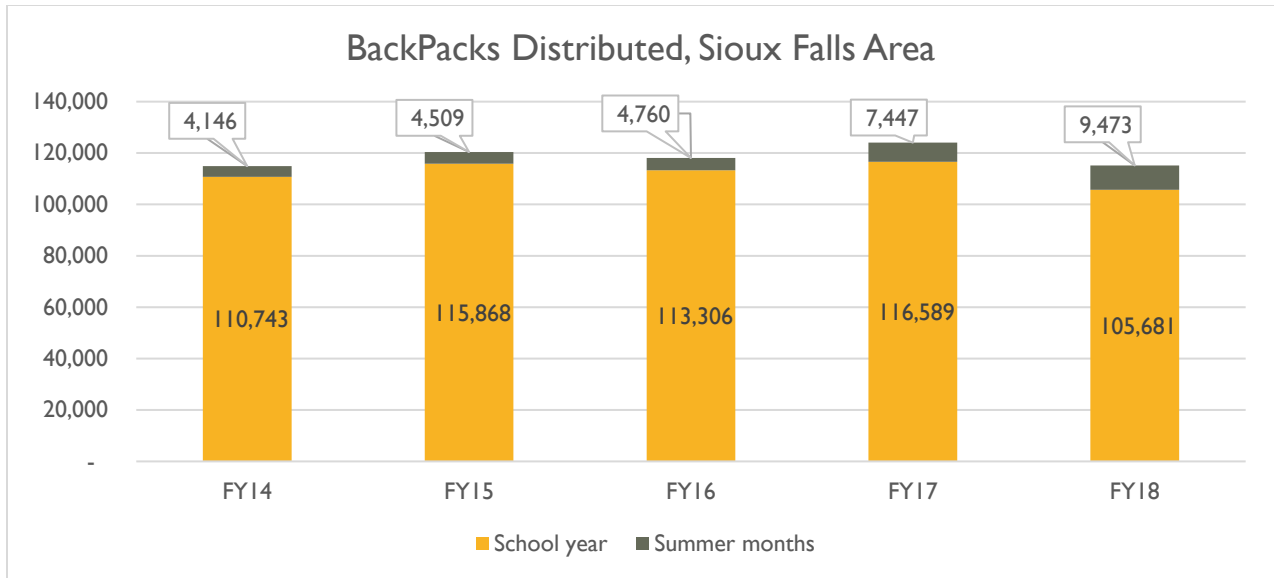


Figure 2. BackPacks Distributed by Fiscal Year, Sioux Falls Area⁶

Feeding South Dakota estimates that the Backpack Program is currently able to fill the need that exists in the community.

Supplemental Nutrition Assistance Program (SNAP)

The Supplemental Nutrition Assistance Program (SNAP), formerly the Food Stamp Plan, has its roots in Depression-era efforts to help needy families. Since its inception in 1939, it has evolved and expanded. In 1974, Congress required all states to offer food stamps to low-income households. Today, SNAP is a program of the USDA, administered jointly with state agencies—in South Dakota, the Department of Social Services. Program funding is set by the Farm Bill. Benefits are fully funded by the federal government, and administrative costs are split between the states and federal government. SNAP food benefits account for the major part of SNAP funding (93.2% of federal spending for SNAP) (CBPP 2018).

SNAP Eligibility

Today, to participate in SNAP, households must meet the following eligibility requirements:

- Have no more than \$2,250 in assets, such as bank accounts. Primary residence and one vehicle are excluded. Limits are higher for households in which someone has a disability or is age 60 or older.
- Gross monthly household income is 130% or less of the federal poverty guidelines, and net monthly income is 100% or less.⁷
- Meet certain work requirements (applies to most able-bodied adults).
- Have or have applied for a Social Security number.

Families can apply for SNAP with South Dakota DSS online, by mail, in person, or over the phone.

⁶ Reporting is based on Feeding South Dakota’s fiscal year, which runs July 1 – June 30. Summer months for one fiscal year therefore include July and August from one calendar year and June from the following calendar year.

⁷ Net income is adjusted for costs of shelter, dependent care, child support, and medical expenses for people with a disability or over 60. Households in which someone has a disability or is over 60 are subject only to the net income test.

In June 2018, the average monthly number of SNAP recipients in Lincoln and Minnehaha Counties was 8,866 households, or 18,100 individuals, of whom 8,566 were under 18. Over the last five years, the number and rate of SNAP recipients in these counties has declined, but remains elevated above pre-2008 recession levels. The overall number of SNAP recipients in Lincoln and Minnehaha Counties peaked in 2011, at 23,368 individuals, or 10.7% of the population (Figure 3 and Figure 4).⁸

Similarly, the number of eligible children grew drastically as a result of the 2008 recession. SNAP receipt among school-age children peaked in 2012, when 7,033 children ages 5 to 17 (more than 15%) in Lincoln and Minnehaha Counties received SNAP benefits. It has declined slightly since 2012, but remains well above pre-2008 levels. During 2017, the number of school-age children in Lincoln and Minnehaha Counties receiving SNAP each month averaged 6,191 (about 12% of the school-age population) (Figure 5 and Figure 6).

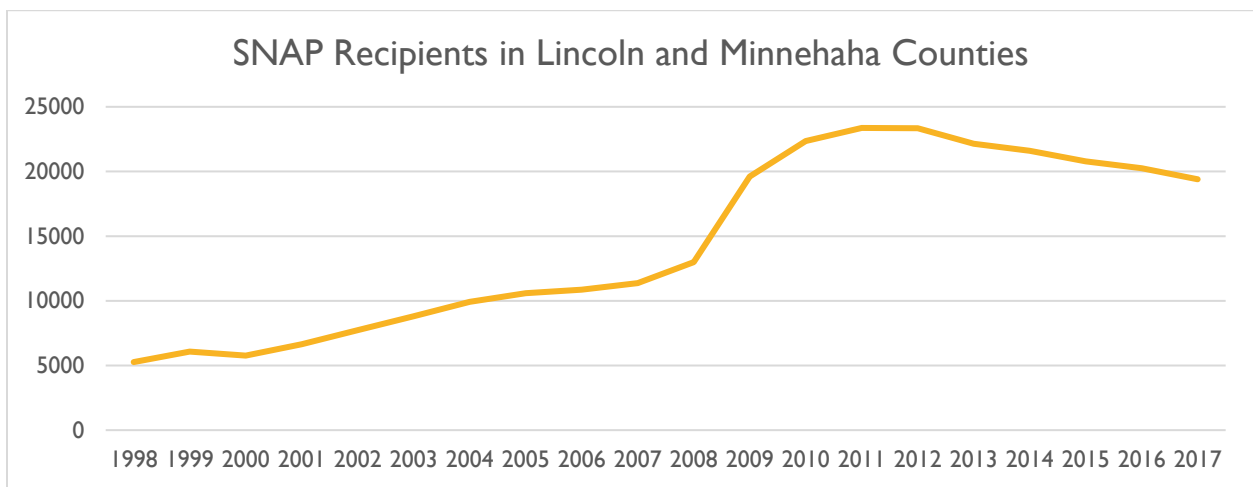


Figure 3. SNAP Recipients in Lincoln and Minnehaha Counties, 1998-2017

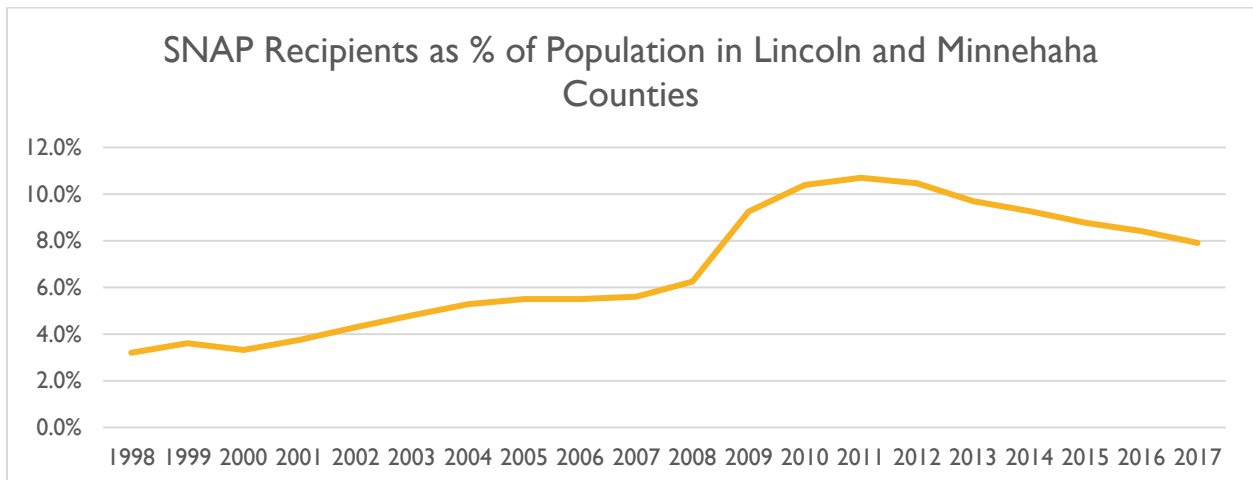


Figure 4. SNAP Recipients as % of Population in Lincoln and Minnehaha Counties, 1998-2017

⁸ By comparison, in Minnehaha County, about 15.6% (27,677 people) are below 125% of poverty, and in Lincoln County, about 5.3% (2,694 people) are below 125% of poverty—an estimated total of about 30,371 people below 125% of poverty.

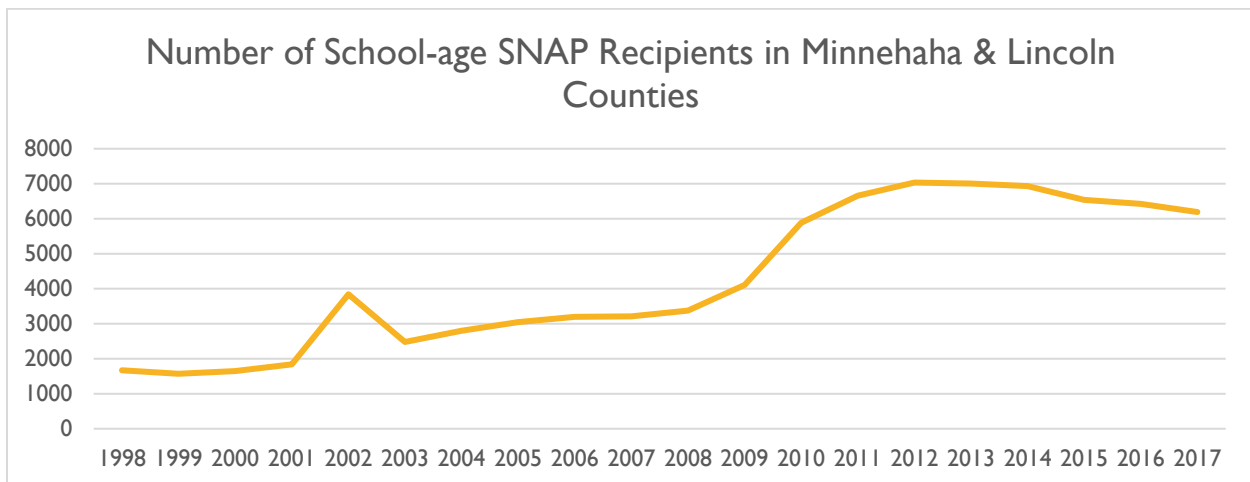


Figure 5. Number of School-age SNAP Recipients in Minnehaha & Lincoln Counties, 1998-2017

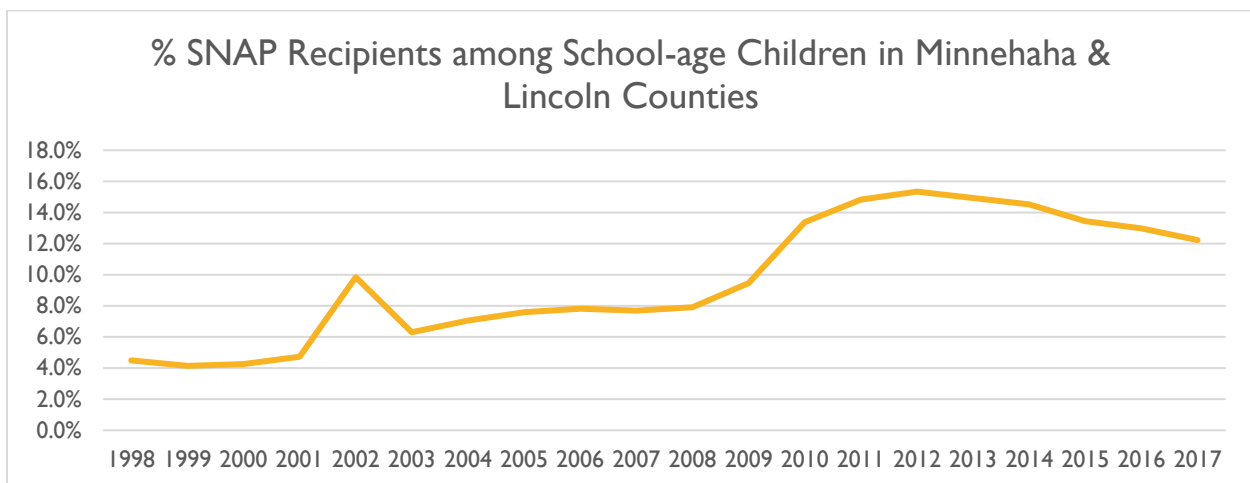


Figure 6. % SNAP Recipients among School-age Children in Minnehaha & Lincoln Counties, 1998-2017

Note: % SNAP Recipients among School-age Children compares number of children ages 5 to 17 receiving SNAP (Source: Kids Count/DSS) to population estimates of children ages 5 to 19 (Source: Census Population Estimates).

Fluctuations in the number of school-age children receiving SNAP have mirrored fluctuations in the overall number of people receiving SNAP. As a result, the composition of SNAP recipients by age has been stable. From 1998 – 2017, the percentage of SNAP recipients who are school-age children has stayed fairly steady at around 30%.

SNAP Benefits

SNAP benefits can be used to purchase foods to prepare at home as well as seeds or plants that produce food. They cannot be used for alcohol or tobacco, nonfood items such as pet food and hygiene products, vitamins or medicine, or hot foods or foods that will be eaten in the store.

SNAP recipients have an EBT card, which looks like a regular plastic credit or debit card. Each month, SNAP benefits are credited to the account, usually on the 10th of the month. For new SNAP applicants, the process can be expedited and benefits can be issued the morning after approval. The EBT card can be swiped and used like cash at eligible stores (with the restrictions on types of items that may be purchased noted above).

The value of monthly benefits a family receives depends on the family's income and household size. Eligible households are issued a monthly allotment based on the approximate cost of the USDA's Thrifty Food Plan (described above) for the household's size, minus 30% of the household's net income. In other words, SNAP allotments assume that families will spend 30% of their net income on food, then SNAP benefits make up the difference between that amount and the estimated cost of a nutritionally adequate diet. For example, in 2018, the maximum monthly allotment for a family of four was \$640.⁹ If a family's net monthly income was \$1,000, the SNAP benefit formula would expect the family to pay \$300 per month for food, and the family would receive \$340 in SNAP benefits to total \$640 per month available for food spending.

As noted above, some might argue the Thrifty Food Plan (and therefore the SNAP benefit formula) make unrealistic assumptions about food costs, access, and families' abilities to prepare food. It may be unrealistic to expect low-income families to allocate 30% of net income to food purchases without trading off with other necessary expenses. Further, the maximum SNAP allotment falls far short of Feeding America's estimate of monthly food costs, which for Sioux Falls is over \$1,000. One indication that SNAP benefits may not meet all of a household's food needs is the proportion of SNAP recipients who visit food pantries. Nationally, an estimated 27.9% of low-income households that received SNAP benefits also obtained food from a food pantry (Coleman-Jensen et al. 2017b).

Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

The Special Supplementation Nutrition Program for Women, Infants, and Children, or WIC, is a targeted nutrition program focused on the supplemental nutritional needs of pregnant, breastfeeding, and postpartum women and of infants and children. Eligibility is based both on financial and nutritional need. Participants receive both food packages and regular nutrition counseling.

WIC is intended only to supplement diets with the additional nutrients and calories needed by the target populations. It is not intended to meet general food security needs. Nor does WIC serve school-age children, except for pregnant teenagers. However, WIC likely serves women and young children who live in households with older school-age children, and the program also benefits infants and children who will become school-age children.

WIC is funded by the USDA and administered, in South Dakota, by the South Dakota Department of Health. WIC is a federal grant program, not an entitlement program, which means Congress authorizes a specific amount of funds annually and does not guarantee that every eligible person will be able to participate. However, the South Dakota WIC office reports that they are able to serve all who apply and are eligible; they have never had, nor do they currently have, a waiting list for WIC participants.

To apply for WIC, applicants must make an appointment with a local WIC clinic. At the appointment, applicants are asked to provide proof of income and state residency, a dietary profile and health history,

⁹ By comparison, the USDA Thrifty Food Plan estimated the monthly cost of food at home for a family of four with two school-age children at \$644.50 (USDA 2018).

height and weight measurements, and a blood test. In Sioux Falls, the WIC clinic is located at 1200 N. West Ave, near the Premier Center.

Women may learn about WIC by referral from hospitals, clinics, shelters, Head Start or daycares, the Department of Social Services, other Department of Health programs, or elsewhere.

WIC Eligibility

To be eligible for WIC, participants must meet income guidelines and a state residency requirement, have a demonstrated nutrition risk, *and* fall into one of the following categories:

- Women who are pregnant: Eligible during pregnancy and up to six weeks after the birth of an infant or the end of the pregnancy.
- Women who are postpartum: Eligible up to six months after the birth of the infant or the end of the pregnancy.
- Women who are breastfeeding: Eligible up to the infant's first birthday.
- Infants: Eligible until age one.
- Children: Eligible until age five.

Income guidelines are automatically met by those who receive SNAP, Medicaid, TANF, or FDPIR. Otherwise, applicants must have gross income at or below 185% of the federal poverty guidelines. Nutrition risk is assessed by WIC Program Health Professionals, who conduct individual nutrition assessments for applicants. The assessment includes measures of height, weight, anemia, and a questionnaire about diet and nutrition.

In Minnehaha and Lincoln Counties, the number of WIC participants has declined slightly over the past five years, from a monthly average in 2013 of 3,670 participants to 3,525 in 2017 (Figure 7). For 2017, the South Dakota WIC office reports serving 67% of eligible individuals in Minnehaha County and 12% in Lincoln County. Statewide, the program reports serving 98% of eligible infants, 44% of eligible children, and 92% of eligible women (SDDOH 2017).

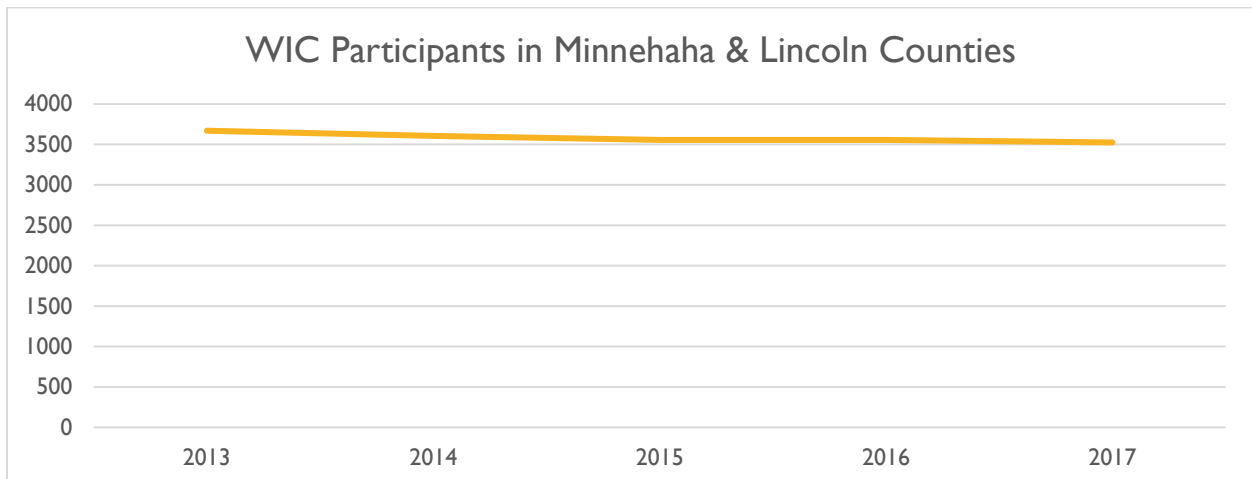


Figure 7. Average Monthly WIC Participants in Minnehaha & Lincoln Counties, 2013-17

Source: SD DOH WIC Annual Reports

WIC Benefits

Compared to general nutrition programs such as SNAP, WIC provides more targeted assistance. WIC food packages are individually prescribed based on nutritional needs. They are intended to be supplementary and to address specific nutritional deficits (e.g., protein, iron, calcium, vitamins A & C). Statewide in South Dakota, the average value of monthly WIC food packages is around \$45 (USDA FNS 2018). In addition to food packages, WIC participants also receive nutrition counseling, breastfeeding support, and immunizations and referral for healthcare services.

To receive benefits, WIC participants must come in person to the WIC clinic on a regular basis (e.g., monthly). During these regular appointments, participants receive nutrition education and have benefits issued to an eWIC card. Like SNAP EBT cards, eWIC cards look like regular debit or credit cards but are tied to a participant's WIC benefits. However, WIC benefits can only be used to purchase food types included on an individual's nutrition plan. During regular visits, clinic staff review food options with participants and provide a shopping list showing an individual's current benefits. Participants may also call an automated, interactive phone system to see what their current benefits are and may scan their eWIC card at authorized stores to check their remaining benefits balance.

Minnehaha County Extension

SDSU Extension provides nutrition education through their Expanded Food and Nutrition Education Program (EFNEP) and Supplemental Nutrition Assistance Program-Education (SNAP-Ed). Both programs focus on helping families make healthier food choices and helping children develop healthy eating behaviors when resources are limited. Participants learn about strategies for saving money, reading food labels, and keeping food safe, among other related topics.

Nutrition education programs through SDSU Extension are free. They are intended to serve families and individuals on a limited budget or on economic assistance. Representatives from SDSU Extension estimate the program reaches over 300 adult and 3,000 youth participants annually.

Programs are held at the SDSU Extension offices as well as on-site at Head Start programs, food pantries, social service agencies, schools, afterschool programs, and similar locations.

SDSU Extension actively partners with other organizations and agencies, including SNAP, Live Well Sioux Falls and the Sioux Falls Food Council, WIC, Bright Start, New Start, the Salvation Army, Feeding South Dakota, and Volunteers of America, among others.

Live Well Sioux Falls

Live Well Sioux Falls is a health initiative of the City of Sioux Falls, intended to improve the health and wellbeing of city residents. One area of focus for Live Well is nutrition. The following initiatives are part of Live Well's 2018 nutrition focus area:

- **Sioux Falls Food Council** – A diverse group composed of citizens, advocates, industry partners, dietitians, Extension Agents, and nonprofit organizations, the Sioux Falls Food Council is currently focused on increasing fruit and vegetable consumption in the community. The council's Eat Well, Live Well campaign monthly distributes 2,100 copies of recipes featuring a produce item to 12 local grocery stores, Falls Community Health, Active Generations, and the Department of Social Services. Beginning in January 2018, Live Well has produced video versions of these recipes and distributed them via Facebook to increase awareness. Videos include both the recipe and a nutrition tip. In partnership with Cooking Matters, a nationwide group that provides training and educational materials, the council also offers grocery store tours to teach

basic nutrition and help people provide healthy food for their families. Live Well has also produced a video walkthrough of a local grocery store featuring nutrition tips for each section of the store (e.g., buying produce in season, lean meats, and low-sodium canned goods).

- **Food Purchasing Site Mapping** – With the city’s GIS and Planning and Zoning Departments, Live Well has developed maps of low-income, low-access food areas along with food purchasing locations. The maps are intended to inform city growth. In the future, maps could be used to coordinate city efforts around health and wellness, to inform zoning and regulation, or to identify areas in which the city might offer incentives to certain types of food-related businesses.
- **Healthy Place Program** – Working with dietitians, restaurants, the American Heart Association, and other city departments, Live Well has launched the Healthy Place Program to encourage consumers to make healthier choices when dining out. The Healthy Place Program has established a set of detailed criteria food outlets can use to enhance their menus to encourage healthy choices for families. The criteria address portion size, staff training, menu selection, and sustainable practices. Food outlets that meet 80% of the criteria can be designated a Healthy Place, a three-year certification. The Healthy Place Program will provide a list of Healthy Place food outlets to consumers. The program is intended to help consumers make healthier choices when dining out and to incentivize food outlets to develop healthier menus by striving to meet the program’s criteria.
- **Fruit and Vegetable Prescription Pilot Program** – Food prescription programs provide nutrition education and redeemable produce prescription vouchers. In April 2018, Live Well undertook a week-long Fruit and Vegetable Prescription and Food Pharmacy Prototype to test the program locally. The prototype was a joint effort among Live Well, Falls Community Health, Active Generations, and The Good Samaritan Society. During the test week, 25 patients who were seen by the dietitian at Falls Community Health or who attended a nutrition class at Active Generations were given a prescription to pick up a pre-filled bag of fruits and vegetables worth \$10. In surveys, they reported increasing their fruit and vegetable consumption, and also identified cost and transportation as barriers to doing so regularly.

Feeding South Dakota

In addition to administering the Backpack Program and Food Pantry, both of which directly serve children and families, Feeding South Dakota serves as a Food Bank that collects and distributes food to other organizations who in turn distribute food to individuals or families.

In the summer of 2018, Feeding South Dakota formed a Food Security Task Force to address charitable food distribution gaps in Sioux Falls. In a report issued in October 2018, the Task Force identified the following as potential solutions to bring food distribution models into neighborhoods:

- **Food distribution trailer:** A trailer with refrigeration allows flexibility to distribute food within or adjacent to neighborhoods. In Rapid City, Feeding South Dakota has outfitted a food distribution trailer with refrigeration, freezers, and moveable storage carts at a cost of approximately \$185,000. Pending results of the pilot model in Rapid City, a similar model could be implemented in Sioux Falls.
- **Partners for rotating pantry food distribution:** Members of the Task Force developed a charitable food distribution model that could be implemented with partner organizations in targeted neighborhoods. The model is based on the Food to You Mobile Food Pantry managed by Charis Ministries in Sioux Falls. Food to You partners with four churches to distribute food in neighborhoods. Each church hosts a monthly food distribution event.

- Evening and weekend events: The Task Force recommended that new or existing charitable food distribution events be scheduled for evening and weekend times when people who cannot leave work during weekdays can attend or volunteer.
- Marketing: The Task Force recommended better marketing and information sharing about where and when food distributions take place. The Helpline Center could facilitate by using their text messaging system to notify people who opt in with alerts for upcoming distributions. At a minimum, the Task Force recommended compiling a calendar with site locations, days, times, and eligibility for distributions.

System of Stakeholders

The actor map on the following page provides a high level visual depiction of the food system in Sioux Falls. Stakeholders are arranged into segments (e.g., Food Pantries and Giveaways). Within each segment, stakeholders closer to the middle of the map tend to interact more closely with or provide more direct assistance to food insecure families. For example, in the Food Pantries and Giveaways sector, the pantries and giveaways in red are those who were mentioned most in focus groups, whose eligibility criteria are the broadest, or who serve the largest population. In blue, church-based pantries play an important role, but tend to serve fewer people. In green, holiday giveaways only operate at certain times of year, and program-specific pantries are available only to program participants (e.g., residents of Children’s Inn or students at Sioux Falls Seminary). In black, Bread Break helps support this segment by harvesting unused food and distributing it to organizations that can share it directly with families.

In addition to the actor map, further detail is provided below about particular pantries and giveaways, charitable meals, and emergency assistance providers in Sioux Falls.

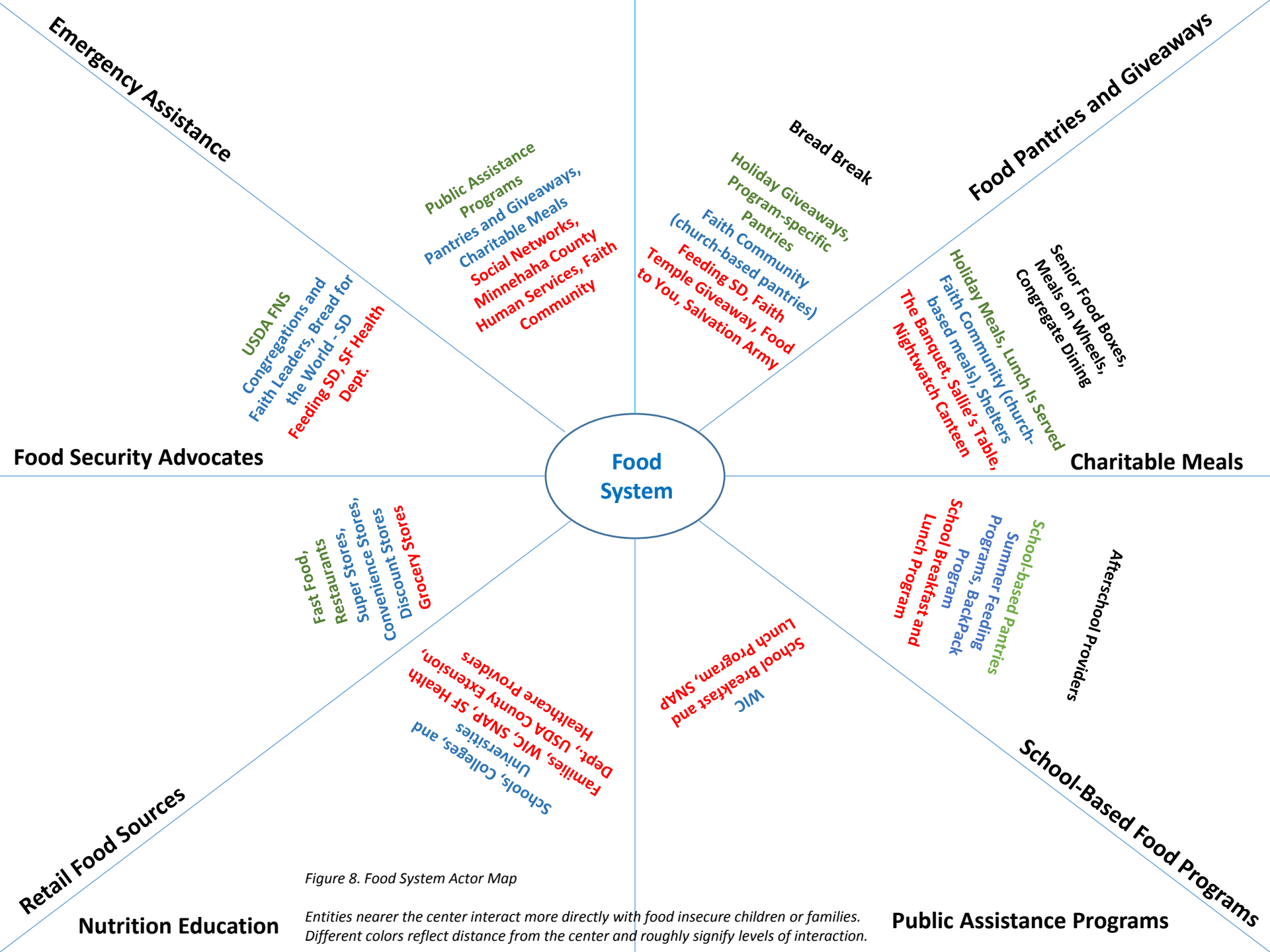


Figure 8. Food System Actor Map

Entities nearer the center interact more directly with food insecure children or families. Different colors reflect distance from the center and roughly signify levels of interaction.

Pantries and Giveaways

Table 6 describes the major food pantries and giveaways in Sioux Falls. These pantries and giveaways are generally available with few restrictions on eligibility, though most require that visitors show a photo ID and have restrictions on how frequently families may visit.

Table 6. Major Pantries and Giveaways in Sioux Falls

Name	Location	Hours	Eligibility	Accessibility
Feeding SD Food Pantry	4701 N. Westport Ave.	10am -4pm, M – F	May visit once every 90 days	By car. Nearest bus route is by University Center, about 1 mile.
Faith Temple Food Giveaway	100 Lyon Blvd. (Fairgrounds)	4pm, Fridays	18 or older. No restrictions on frequency.	By car. Nearest bus route is on 12 th St. or Russell St.
Food to You Mobile Food Pantry	Rotates among 4 churches: East Side Lutheran, Messiah New Hope Lutheran, Augustana Lutheran, St. John Lutheran	6-7pm, Thursdays (No distribution on 5 th Thursdays)	May visit once per month	By bus, car, or on foot
Salvation Army Food Pantry	800 N. Cliff Ave.	1-3:30pm, MWF	May visit once per 30 days. Must provide proof of income.	By bus, car, or on foot

In addition to the pantries and giveaways described in Table 6, an estimated five to ten churches in Sioux Falls host smaller food pantries. In some cases, church pantries are available only to members of the congregation or to worship attendees. They tend to have very limited hours (e.g., only immediately following services) or to be available by appointment only, and most provide only non-perishable items and, sometimes, hygiene supplies.

Some programs also provide food pantries or distribute food to participants only. For example, the Sioux Falls Seminary has a food pantry available for seminary students only.

Charitable Meals

Table 7 describes the major providers of charitable meals in Sioux Falls. These meals are generally available to families with few restrictions on eligibility. Most are served hot and consumed on site, except for Lunch Is Served, which provides a cold sack lunch for people to bring to work.

Table 7. Major Charitable Meals in Sioux Falls

Name	Location	Hours	Eligibility	Accessibility
The Banquet	900 E. 8 th St.	7-8am and 6-7:30pm M-F, 11:30am-12:30pm Saturday	All are welcome	By bus, car, or on foot
The Banquet West	100 Lyon Blvd. (Fairgrounds)	6-7:30pm, Tuesday and Wednesday	All are welcome	By car. Nearest bus route is on 12 th St. or Russell St.
Sallie's Table	800 N. Cliff Ave.	5-6pm, Saturday and Sunday	All are welcome	By bus, car, or on foot
Union Gospel Mission	701 E. 8 th St.	6:15am, 12pm, 8:30pm daily	All are welcome	By bus, car, or on foot
Bishop Dudley Hospitality House	101 N. Indiana Ave.	11:30am, M-F	Part of day program for homeless/working poor	By bus, car, or on foot
Lunch Is Served	Available at the Banquet and the Banquet West, St. Francis House, and People Ready	12pm, M-F and Saturday	Must show proof of employment	By bus, car, or on foot
Nightwatch Canteen	401 S. Spring Ave. and 205 E. 6 th St.	9-10am, 4:45-5:15pm, and 5:30-6pm Sunday	All are welcome	By bus, car, or on foot

In addition to the meals described in the table above, an estimated five to ten churches provide occasional charitable meals, often in the form of a weekly supper or a holiday meal. These meals are often open to the public and coupled with a service or program.

Several service providers also offer program-specific meal services. For example, Safe Home provides meals to residents, as does Children's Inn and Berakhah House. Both formal and informal afterschool programs offer snacks to school-age participants (e.g., Multi-Cultural Center, Oak View Library). A few senior-specific meal programs, including congregate dining programs and Meals on Wheels, serve a significant number of people, but are age-restricted and do not serve school-age children.

Emergency Assistance

Sometimes, families need food immediately and cannot wait for SNAP benefits to begin, food pantry eligibility to reset, or someone to offer a ride to a pantry or meal. For those families, emergency assistance in the form of transportation, gift cards, and food vouchers helps fill the gap.

Organizations including Minnehaha County Human Services, St. Francis House, Celebrate Church, and St. Vincent de Paul provide gifts cards or food vouchers. Usually, these are provided as a one-time service, and families are referred to food pantries for additional help. Bishop Dudley may also provide a bus pass or facilitate rides to Feeding South Dakota’s food pantry, and the Center of Hope provides rides to Feeding South Dakota’s food pantry as well.

The Role of Individual Behavior

The programs and systems described in this report exist in order to provide support to families and children facing food insecurity. These systems—along with the retail food landscape—structure incentives that can influence individual choices about food and nutrition. An emerging body of research looks at individual decision-making processes alongside systems to ask how the systems that stakeholders control can be leveraged to nudge individual choices about food in certain directions.

This research recognizes that fully addressing food security encompasses two competing goals: ensure low-income families have *enough* food, but also lower the risk of obesity and other negative health outcomes by encouraging families to eat healthy foods in healthy amounts. Traditionally, food security interventions focus on providing sufficient food; adding a focus on nutrition and health outcomes requires attention to individual behavior and choices. Traditional policy approaches—taxing junk food to raise prices and discourage consumption or distributing health information assuming better informed individuals make better choices—have had little effect on individual dietary choices. This is because families do not make entirely rational decisions about food—they are not nutritional calculators, but humans whose tastes, preferences, whims, and desires significantly shape decisions around diet, and in turn are shaped by the environment around them (Just 2006).

The behavioral science behind so-called nudges suggests ways in which policies and programs can take into account irrational psychological tendencies around food and nudge individual behavior in a certain direction. In general, nudges focus on making desired behavior easier and more convenient while making undesired behavior more difficult and less convenient—that is, making the desired option the default option. This general principle can be applied in numerous ways, from increasing enrollment in nutrition assistance programs to nudging people toward healthier diets.

For example, consider the following selected lessons from behavioral science research around food and diet (examples from Just 2006):

- People are more willing to add good foods to their diets than to give up bad foods.
- When people are pressed for time, distracted, stressed, or overwhelmed by the number of decisions at hand, they make impulsive decisions; that is, they resort to making rapid decisions based on feelings rather than deliberative decisions based on rational thinking.
- What and how much people eat is influenced by packaging, presentation, the environment, and the behaviors and food choices of people around them.

Based on these lessons as well as other principles from the behavioral sciences, stakeholders might propose policy and program changes to encourage healthy consumption habits. Consider these examples of changes that could nudge consumers toward healthier food choices:

- For food pantries, place healthier foods near the entrance to the pantry. Shoppers are less likely to pick up items as their baskets fill up; strategic placement helps ensure the healthiest items end up in the basket first (Rivera et al. N.d.).

- For school lunch programs, place less healthy items (e.g., dessert) out of view or make them less convenient to access (e.g., available only by request). Requiring students to expend more mental and physical effort could reduce consumption of less healthy items (Just 2006).
- For SNAP, distribute benefits more frequently (e.g., weekly instead of monthly). This change could even out consumption patterns across the month, reducing stockpiling or overconsumption at the beginning of benefit periods. It might also encourage SNAP recipients to purchase more perishable items, such as fruits and vegetables (Uslan et al. 2016, Ammerman et al. 2017).
- Prominently label foods that are packaged into smaller serving sizes or that are less calorie dense. This may help overwhelmed shoppers identify and select those foods (Just 2006).

The examples above are for illustration only, not definitive recommendations.

2 Food Security and Food Access

Sections Food Security and Food Access² through 12 were previously published in December 2017 as “Food Security and Food Access in Sioux Falls, SD,” a report produced for Sioux Falls Thrive and Feeding South Dakota by the Augustana Research Institute.

Food Security

National rates of food security are measured by the USDA’s Economic Research Service (ERS), which reports annual measures of food security based on the U.S. Census Bureau’s Current Population Survey (CPS) Food Security Supplement. This national survey uses an 18-item household food security scale to determine a household’s level of food security.

This survey defines households as food insecure if they have low or very low food insecurity: Low food security means that, at some point during the previous year, they had trouble providing enough food for the household due to lack of resources. Very low food security means that some household members reduced their food intake or disrupted their normal eating patterns (e.g., skipping meals) because they could not afford enough food.

Nationally in 2016, 12.3% of households experienced food insecurity, and 4.9% experienced very low food security.

Rates of food insecurity are higher among certain subgroups, including households with children, single parent households, households headed by black or Hispanic people, and low-income households with incomes below 185% of the poverty threshold. Nationally, an estimated 17.5% of children live in food-insecure households, although those children may be buffered from the effects of food insecurity by adults who make more significant changes to their own diets for the sake of their children (Coleman-Jensen, Rabbitt, Gregory, and Singh 2017).

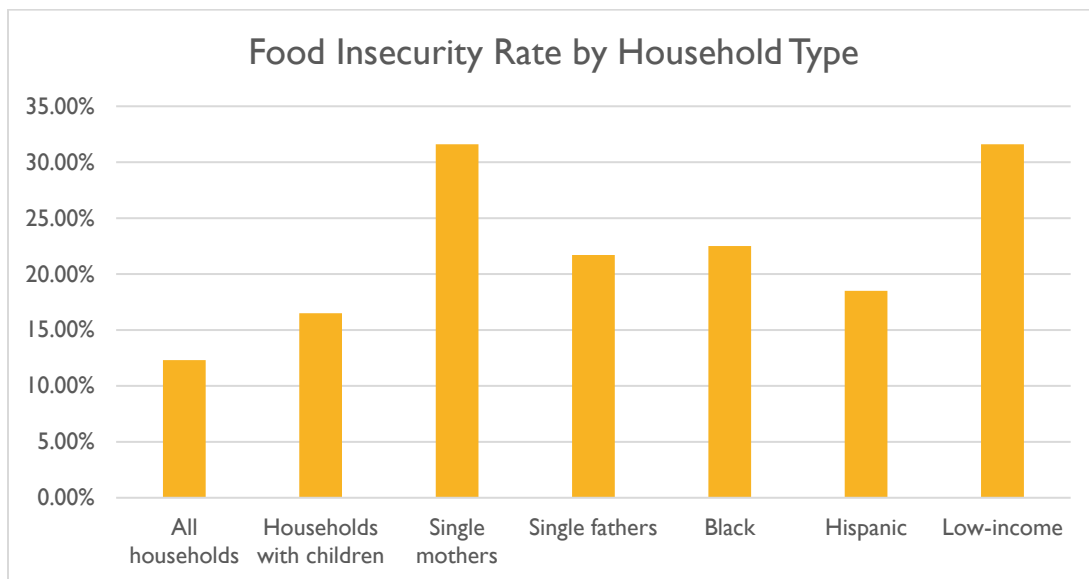


Figure 9. Food Insecurity Rate by Household Type, United States

Source: Coleman-Jensen et al. 2017b

A variety of federal programs and local initiatives aim to address food insecurity. Nationally, about 59% of food-insecure households participated in one or more federal programs (SNAP, WIC, free or

reduced school lunch). Among low-income households who participated in one or more federal programs, about 24.5% also reported visiting a food pantry. Overall, an estimated 4.8% of low-income households, 6.9% of low-income households with children, and 12.9% of low-income female-headed households with children reported visiting a food pantry (Coleman-Jensen et al. 2017b).¹⁰

National surveys are useful, but they offer limited insight into the local experience of food security and how households experiencing food insecurity access community food assets. This report describes the ways in which Sioux Falls residents experience food insecurity and documents retail and charitable food assets available in the Sioux Falls community.

What Is a Food Desert?

Food security may be the result of the inability to access sufficient, healthful foods, whether because of income or distance. Conceptually, food deserts measure both financial and geographic barriers to accessing food. This report adopts the USDA ERS's definition of food deserts as low income, low access Census tracts.

Low access tracts are those where a significant number or share of people live far from a supermarket. In this report, that means at least 500 people or 33% of residents in a tract live more than ½ mile from a supermarket. Distance is measured as the crow flies, so in most cases, people must travel farther than the distance measured in order to navigate streets or sidewalks.

Low income tracts are defined following criteria from the Department of Treasury's New Markets Tax Credit program. According to those criteria, low income tracts are those with a poverty rate of at least 20% or where median family income is less than 80% of the median for the metropolitan area.

Do Food Deserts Matter?

Several attempts have been made to assess whether and by what mechanism food deserts contribute to food insecurity. Hypothetically, low-income areas have insufficient demand to attract retail grocery stores, and poverty and lack of vehicle access prevent people from traveling for better prices or quality.

Empirical research has found that people who live in food deserts eat less healthful foods, but suggests that food access and diet quality depend more on income than geography. USDA ERS investigated the correlation between living in a food desert (low-income, low-access area) and diet quality (the purchase of 14 major food groups) using data from the 2010 Nielsen Homescan Survey, which includes prices, consumer demographics, and shopping behavior (where consumers shop and what they buy). The study found that living in a low-income, low-access area has a modest negative effect on healthful food purchases: food desert residents purchased fewer fruits and vegetables and low-fat milk products, but more red meat, diet soda, and non-diet drinks. But they also found that almost all food desert residents traveled outside the food desert to buy food; they did not limit their purchases to stores within the food desert area, and they did not rely on nearby convenience stores as might be supposed. Instead, they shopped at the same types of stores as others (supermarkets and supercenters). Evidence from

¹⁰ These estimates are based on households with incomes below 185% of the poverty threshold who responded to the CPS. Because the CPS only surveys people who are housed, it omits the homeless population. It therefore likely underestimates food insecurity and may also underestimate the use of soup kitchens or food pantries (although, because food pantries require access to cooking facilities to make use of food, those estimates may be less biased).

studies in Minneapolis, New York City, and Chicago likewise suggests that low-income households are savvy consumers who seek out and travel to find lower food prices (Rahkovsky and Snyder 2015).¹¹

Another USDA ERS study used a newly available USDA data product, the National Household Food Acquisition and Purchase Survey (FoodAPS), to compare shopping habits of SNAP households, WIC households, and food-insecure and food-secure households. It found that SNAP participating and food-insecure households are less likely to drive and more likely to get rides, walk, bike, or take public transit to grocery stores: About 66% drive their own vehicle, but 21% use someone else's car or get a ride, and 13% walk, bike, or take public transit. By comparison, 95% of non-SNAP households with income above 185% poverty drive their own car. Despite different modes of transportation, households shop at the same types of stores—supermarkets and supercenters—and many bypass the nearest stores to shop elsewhere. On average, SNAP households lived under 2 miles from the nearest grocery store but shopped at stores an average of 3.3 miles from home. Even households that do not drive shop around: those who walk, bike, or ride public transit shop at stores an average of 0.9 miles away even though, on average, the closest supermarket is 0.5 miles away (Ver Ploeg, Mancino, Todd, Clay, and Scharadin 2015).

In short, food deserts matter, but eliminating geographic barriers to healthful food will not do away with financial or behavioral barriers to changing diets. Current research points to the need for a two-pronged approach to addressing food access: Locating grocery stores in food deserts will not matter unless shoppers change their shopping habits, which requires the time, knowledge, and desire to purchase and prepare healthier foods. Likewise, trying to change habits or provide nutrition education will do little where it is too difficult or expensive to access healthful foods.

3 Food Access Maps: Data and Methodology

Compared to the USDA's Food Access Research Atlas, this report offers more recent and more detailed local data to provide a richer picture of the current state of food security in Sioux Falls.

As of December 2017, the USDA's Food Access Research Atlas is based on a 2015 directory of supermarkets, 2010 Census data on population, and 2010-14 American Community Survey (ACS) data on vehicle access and family income. This report uses more recent data, including supermarkets and other retail locations that sell food as of December 2017 and 2012-16 ACS data on population, vehicle access, and family income.

Whereas the USDA's Food Access Research Atlas includes only major supermarkets with annual sales of \$2 million or more, this report includes all local retail food assets, including small, independent grocery stores, convenience stores, drug stores, and dollar stores. It also includes local charitable food assets, including food pantries, food giveaways, and charitable meals. This report also brings together detailed information on hours, types of food available, and other characteristics of both retail and charitable food assets in Sioux Falls.

¹¹ This study likely excludes the very poor because data were collected from households with internet access. For very low income households, geographic access might matter more.

Data

Data sources used to compile the food access maps are described below.

American Community Survey 2012-16 5-year estimates

In this report, the American Community Survey (ACS) is the primary source of demographic data, including estimates of population, households, renters, poverty, median family income, vehicle access, and SNAP participation.

The ACS is an annual survey conducted by the U.S. Census Bureau. Unlike the decennial census, the ACS is a sample survey. Only a small proportion (around 3%) of households are surveyed each year. Five-year estimates combine data from multiple years in order to reduce the margin of error and provide more reliable estimates. The 2012-16 estimates adjust for inflation and present dollar amounts in 2016 dollars.

SNAP Retailer Locator

The USDA Food and Nutrition Service (FNS) makes available a SNAP retailer locator, which was used to retrieve a list of South Dakota retailers who accept SNAP. The list was reviewed to remove retailers who have recently closed and those located outside of Sioux Falls.

City Food Service Inspections

Most, but not all, retail food assets accept SNAP. To catch those who do not, researchers also reviewed the City of Sioux Falls Health Department's records of food service inspections for grocery and food processing facilities. Only those selling directly to consumers were included. Casinos were excluded.

Helpline Center Database

The Helpline Center (211) maintains a database of community food assets, which served as the starting point for data collection of charitable food assets.

City of Sioux Falls GIS

Through the Sioux Falls Data Warehouse, the city makes available its open GIS files, including authoritative streets, addresses, bus routes, and schools. The schools file includes all schools, public and private, primary through postsecondary.

Sioux Falls School District

The district provided a list of current (2016-17) Title I schools. In this report, maps show only Title I schools serving the surrounding neighborhood. They do not include as Title I schools the Elementary Immersion Center, Middle School Immersion Center, or Bridges at Horace Mann, because these Title I schools serve students from across the city.

Original data collection

Researchers collected information about food asset availability, types of food, and eligibility. They confirmed assets listed in existing datasets and added assets not listed elsewhere.

Methodological Note

The percentage of households or populations that live more than ½ mile from a supermarket was estimated by calculating the percentage of a tract's total area that is more than ½ mile from a supermarket. That ratio was applied to the total population or number of households (or subset, e.g., households without vehicles or households in poverty) to estimate the percentage who live more than

½ mile from a supermarket. This is similar to the USDA ERS methodology for identifying food deserts. However, inaccuracies could arise where tracts contain large areas of undeveloped land with most of the residences concentrated in just part of the tract. The Detailed Maps at the end of this report address this concern by mapping the location of residential addresses in Sioux Falls.

4 Food Access Maps: Overview

The following maps are organized into five groups, with map descriptions presented on the following pages and map images gathered in an appendix at the end of this report: The first group gives an orientation to food desert locations, overlaying food desert areas on maps of poverty rate, median family income, population density, proportions of renter households, and the locations of food pantries and giveaways and charitable meals.

The second group explores food access, taking into account the proportion of households in each area with and without access to a vehicle and the location of small grocery stores not typically included in analysis of food deserts. This group also explores different categories of charitable food assets, including meals for seniors, meals for youth or families with children, and meals, pantries, and giveaways that are available during the evening or on weekends.

The third group shows the locations of charitable food assets and schools (which are key food access points for children and families) over maps of poverty rates and median family income.

The fourth group shows the proportion of households receiving SNAP along with locations of charitable food assets and SNAP retailers. This group also looks at retailer types to compare the prevalence of supermarkets, small grocery stores, and convenience, drug, and dollar stores.

The fifth group offers a brief discussion of nutrition in relation to food deserts and shows retail and charitable food asset locations where different types of food (e.g., dairy, meat, fruits and vegetables) are available.

Ultimately, the following maps suggest three food desert areas that are underserved by both retail and charitable food assets:

- The north central part of the city east of the airport, including the Froehlich Addition and Norton Tracks neighborhoods. Though only a small portion of this area is zoned residential, it is still home to nearly 5,000 people, most of whom live far from both retail and charitable food assets. This area has among the highest rates of households receiving SNAP and of visits to the Feeding South Dakota food pantry.
- The Hayward area, bordered on the south by Skunk Creek and the north by Madison Street and between I-29 and Ellis Road, but especially the area north of 12th Street. Though this area has small grocery stores and relatively high rates of vehicle ownership compared to other food desert areas, it also has very limited access to supermarkets or charitable food assets.
- The Empire Mall area around 49th Street and Louise Avenue has low access to charitable food assets and, despite being a bustling commercial hub, is home to a high proportion of low-income families and families without vehicle access.

5 Food Access Maps: Orientation to Food Desert Locations

The maps described below are included in the appendix. Digital map files are also available online through the Sioux Falls Data Warehouse (<https://opendata.augie.edu>).

Map 1: Food Deserts and Poverty

Food deserts are defined as low income areas with low access to supermarkets. An area may be considered low income either because its poverty rate¹² is 20% or higher or because its median family income is 80% or less of the median family income for the metropolitan area. It is considered to have low access to a supermarket if 33% of the tract's population or at least 500 people live more than ½ mile from a supermarket.

In Sioux Falls, a total of 15 tracts meet the low income and low access criteria and qualify as food deserts. However, only 5 tracts meet the poverty criterion for low income. They are all centrally located near the downtown area.

Food deserts are home to about 37.6% of the city's total population, but about 60% of the population below poverty. Overall, about 63,067 people in Sioux Falls live in food deserts, compared to a city-wide population of around 167,884. About 46,008 of those individuals live ½ mile or more from a supermarket. About 11,484 people in poverty live in food desert tracts in Sioux Falls. Of those, about 8,338 live more than ½ mile from a supermarket. City-wide, about 11.7% of the population is below poverty, compared to about 18.2% of the population in food deserts.

Map 2: Food Deserts and Median Family Income

All 15 food desert tracts in Sioux Falls meet the median family income criterion for low income.

In the Sioux Falls metropolitan area, the median family income is \$74,891, and 80% is \$59,913.¹³ Median family income in food desert tracts ranges from \$34,821 to \$58,837. Median means half of the families in those tracts have income higher than the median and half have incomes lower.

Map 3: Food Deserts and Population Density

Central neighborhoods are more densely populated than outlying areas.¹⁴ The area north of Russell Street is the least densely populated food desert area because much of that tract is zoned for light industrial. Despite its low density, this tract is still home to around 4,523 people in 1,365 households.

Because of its low density and zoning, it has far fewer retail food assets than the rest of the city (see Food Access Maps and Detailed Maps, below).

Map 4: Food Deserts and Renters

City-wide, about 39.1% of households are renters, but in food deserts, about 56.1% rent. Put another way, more than half of the city's renters (55%) live in food deserts, compared to a little over a quarter (27.9%) of homeowners.

¹² This report uses Census poverty thresholds. In 2016, the poverty threshold for a family of four with two children was \$24,339.

¹³ Note that this is median *family* income, not median household income. A household is one or more adults living together; a family is a household with two or more related people. Single adults, for example, are households but not families. Families tend to be larger than households and to have higher income.

¹⁴ Population density is calculated as population per square mile of land area.

Sioux Falls is home to about 66,874 households, of which about 25,850 are located in food deserts and 18,651 live ½ mile or more from a supermarket. Of households in food deserts, 11,350 are homeowners and 14,500 are renters.

Map 5: Food Deserts and Population Density: Pantries and Giveaways

Food pantries and food giveaways provide groceries to prepare at home. In Sioux Falls, pantries and giveaways include Feeding South Dakota's food pantry, Food To You Mobile Food Pantry held weekly at one of four participating churches, the Faith Temple Food Giveaway at the fairgrounds, the Salvation Army's emergency food pantry, and a few smaller church pantries.¹⁵

Pantries primarily serve central, higher density areas. Several food desert areas have no nearby pantry or giveaway, including

- the Froehlich Addition/Norton Tracks area (north of Russell Street),
- the Hayward area (centered around 12th Street west of I-29),
- the area between Western and Minnesota south of 12th to 41st (especially west of Grange Avenue), and
- the Empire Mall area near 49th Street and Louise Avenue.

Map 6: Food Deserts and Population Density: Charitable Meals

Compared to the number of pantries available, Sioux Falls has far more sites offering charitable meals. However, many of these meals serve a limited eligible population (e.g., only seniors or primarily school-age children).

With that caveat in mind, charitable meals have better coverage than pantries, including in the area between Grange and Western. However, like pantries, charitable meals have low coverage in

- the Froehlich Addition/Norton Tracks area,
- the Hayward area (especially south of 12th Street), and
- the Empire Mall area.

¹⁵ Throughout this report, pantries and giveaways shown exclude holiday-only giveaways (e.g., Thanksgiving turkey giveaways and Christmas food baskets) and exclude pantries that are not open to the public (e.g., Sioux Falls Seminary maintains a pantry for its students).

6 Food Access Maps: Access

Map 7: Vehicle Access

“Low vehicle access” indicates food desert areas where at least 100 households without a vehicle live more than ½ mile from a grocery store.¹⁶ In Sioux Falls, an estimated 2,109 households in food deserts have no vehicle, and of those, an estimated 1,480 live more than ½ mile from a supermarket.

Five tracts are flagged as low vehicle access food desert areas. Three are centrally located: they encompass the downtown area and the area north of downtown between 6th Street and Russell Street stretching from Western Avenue to I-229. The other two are outlying tracts that encompass the area around 6th Street and Sycamore Avenue and the area around 49th Street and Louise Avenue.

All of the low vehicle access areas are served by Sioux Area Metro buses. However, focus group participants described difficulty bringing groceries home on the bus. According to participants, riders must hold bags, which limits the amount of food they can carry home by bus. Participants also said that bus schedules can be a barrier to food access: buses only run until 8:45 p.m. on weekdays (6:56 p.m. on Saturdays), and they do not run at all on Sundays.

Other food desert areas have higher rates of vehicle access, so their distance from supermarkets may be less of a concern for residents. That said, focus group participants pointed out that, even if they have a car, driving farther costs more in gas and time. Low-income families with vehicles may still struggle to pay for gas or repairs and upkeep to keep vehicles running reliably.

Note: This map only shows low vehicle access areas that are also food deserts. Some areas have a high percentage of households with no vehicles (e.g., the areas around 57th Street and Marion Avenue and just east of the I-229/I-29 interchange). However, those tracts have not been designated low vehicle access because—even though they have low vehicle ownership and are far from supermarkets—they are not low-income areas. Low vehicle ownership in those areas could reflect the location of senior living communities.

WHERE DO YOU SHOP?

Like higher income consumers, food-insecure households and food desert residents do most of their grocery shopping at large supermarkets, even if they have to travel farther.

Large-scale national studies, as well as research conducted in several major metropolitan areas, show food-insecure households are more sensitive to price than distance—even those who walk, bike, or ride public transit (Rahkovsky and Snyder 2015; Ver Ploeg, Mancino, Todd, Clay, and Scharadin 2015).

Focus group participants agreed. Participants unanimously reported shopping at supermarkets or supercenters (e.g., Wal-Mart), but said they pay close attention to sales and shop the clearance sections. Many participants said they would travel to a more distant store to catch a particularly good sale.

¹⁶ The number of households without a vehicle is calculated by applying a tract’s food desert area ratio to the total number of households without vehicles in that tract.

Map 8: Small Grocery Stores and Food Access

Sioux Falls has a multitude of small grocery stores. Typically, these small grocery stores are tucked into strip malls, and many carry specialty items or serve a particular ethnic community.

Small grocery stores are not shown in national food desert data, nor were they taken into account when designating food deserts for this report (which adopted USDA ERS's definition of food deserts). However, adding small grocery stores to the picture reveals additional retail food assets in some of the city's food deserts.

Small grocery stores are concentrated in the center and east central parts of the city, and they offer walkable access to food in the three centrally located low-vehicle-access food desert areas. However, taking into account small grocery stores only slightly improves retail food access in the outlying low-vehicle-access food desert areas around 6th Street and Sycamore Avenue and around 49th Street and Louise Avenue. Small grocery stores also slightly improve retail food access in the Hayward area around 12th Street and Marion Avenue, but do not change the food access picture for food deserts in the far northwest and northern parts of the city.

Small grocery stores' effects may be further limited because of the types of products they carry. Though most carry some fresh produce and fresh or frozen meat, they do not offer the same selection as a supermarket. And because many are seen as catering to a specific ethnic group, some consumers may disregard them as food assets.

Map 9: Pantries, Giveaways, and Vehicle Access

The Food to You Mobile Food Pantry rotates among four Lutheran churches, covering most of the centrally located low-vehicle-access food desert areas. However, focus group participants expressed a good deal of confusion about when and where this pantry takes place—or even its nature (a few participants believed it was a food delivery service). Several said they were aware of Food to You, but had never gone because they were not sure when or where to go.

Focus group participants acknowledged that Feeding South Dakota's food pantry was difficult to access without a car, but they almost unanimously agreed that the advantages of the location outweighed that difficulty. Participants who did not drive themselves to the pantry said they were able to arrange rides with friends or, in a couple cases, make use of the Center of Hope's shuttle service. Several participants rationalized that since they could only visit the pantry every 90 days, they had time to save for gas or to arrange for rides.

Map 10: Charitable Meals and Food Access

On this map, charitable meals include, for example, summer feeding programs for youth and their families, congregate dining for seniors, evening meals served at churches, and meals served at shelters and the Banquet.

While charitable meals are abundant in Sioux Falls, they are concentrated in the center of the city. Food desert areas west of Kiwanis or north of Russell St. have less access to charitable meals.

Many charitable meals have eligibility restrictions, which are elaborated in the following two maps.

Map 11: Senior Meals and Food Access

Senior meals are senior-focused meals. In many cases, younger family members may join seniors at these meals, but they must pay full price. Seniors have additional meal options not shown on this map because they are also welcome at meals for all ages (e.g., the Banquet). Meals on Wheels serves homebound seniors and, for this population, helps solve the problem of transportation to charitable meals, as does Salvation Army through its senior food boxes.

Map 12: Youth and Family Meals and Food Access

Youth meals are meals available to unaccompanied youth, including summer feeding programs and backpack distributions. They may or may not be open to families as well. Family meals welcome families with children but do not necessarily allow children to come alone. Youth and family meals map closely to public school locations (see following map) because summer feeding programs and backpack distributions take place primarily (but not exclusively) at schools.

Three food desert areas appear underserved by youth and family charitable meals:

- The Hayward area between Louise Avenue on the east, Ellis Road on the west, Madison Street on the north, and Skunk Creek on the south,
- The Empire Mall area around 49th Street and Louise Avenue, and
- The Froehlich Addition and Norton Tracks. The summer feeding program at Laura B. Anderson is about two miles away for Froehlich Addition families, farther for those who live north of Benson Road, and still over one mile for those in the Norton Tracks area.

Map 13: Schools and Food Access

This map shows all Sioux Falls School District elementary, middle, and high schools with Title I schools in orange.

Schools are critical points of food access for children and their families. During the school year, schools provide breakfast and lunch. In the summer, several schools provide lunch and a few offer breakfast. Schools are also distribution sites for the Backpack Program, which provides children with easy-to-prepare meals over the weekend (see Map 26-A).

Map 14: Evening and Weekend Food Access

On this map, evening availability means any time after 5:00 p.m.

Several focus group participants reported a lack of food pantries or giveaways available during the evening or on weekends. They said this is a problem for people who work weekdays, especially those who do not drive since buses do not run on Sunday.

The Food to You Mobile Food Pantry operates in the early evening on Thursdays, with a meal served at 5:30 p.m. and food distribution beginning at 6:00 p.m. However, many focus group participants said confusion about time and place kept them from going to a Food to You pantry, whereas nearly all participants had visited the Feeding South Dakota food pantry or the Faith Temple Food Giveaway at the fairgrounds—neither of which have evening or weekend availability.

Compared to food pantries, charitable meals are more accessible during evenings and weekends. Most supper meals are served after 5:00 p.m.

7 Food Access Maps: Income and Poverty Details

Maps 15 through 20 offer a detailed look at the distribution of food assets overlaid on maps of median family income and poverty rate.

Map 15: Median Family Income: Pantries and Giveaways

Map 16: Median Family Income: Charitable Meals

Map 17: Median Family Income and Public Schools

Map 18: Poverty, Pantries, and Giveaways

Map 19: Poverty and Charitable Meals

Map 20: Poverty and Public Schools

8 Food Access Maps: SNAP Participation and Retail Types

SNAP, formerly known as food stamps, is a federal program that helps alleviate food insecurity. As of September 2017, Minnehaha County SNAP recipients totaled 8,558 households (17,816 persons, including 8,399 children) with an average monthly benefit per household of \$255. In Lincoln County, SNAP recipients totaled 565 households (1,417 people, including 721 children) with an average monthly benefit per household of \$296.

In Sioux Falls, an estimated 4,372 households with SNAP live in food deserts. Of those, about 3,307 live more than ½ mile from a supermarket.

Maps 21 and 22 show charitable food asset availability over rates of SNAP receipt. Maps 23 and 24 show retail food assets that accept SNAP.

[Map 21: SNAP Recipients: Pantries and Giveaways](#)

[Map 22: SNAP Recipients: Charitable Meals](#)

[Map 23: SNAP Recipients and SNAP Retailers](#)

Despite having a high rate of households receiving SNAP (27%), the Froehlich Addition/Norton Tracks area has relatively few SNAP retailers, none of which are full-fledged supermarkets or even small grocery stores.

In general, Sioux Falls has many SNAP retailers, but not all sell a variety of nutritious foods—see Map 24 on retail type and Map 25 on nutrition.

[Map 24: SNAP Recipients: Retail Type](#)

The mix of SNAP retailers mirrors the retail mix overall: most SNAP retailers are convenience, drug, or dollar stores. All of the supermarkets in Sioux Falls—and nearly all of the small grocery stores—accept SNAP.

SNAP SPENDING CYCLES

Because SNAP is such an important support for food-insecure households, it drives consumption patterns. SNAP households have cyclical food purchasing patterns. They spend a lot right after receiving the monthly benefit, then less through the rest of the month.

According to national studies, over the two days after receiving the monthly benefit, SNAP households spend a daily average of \$70. Spending drops rapidly: in the next week, daily average spending is \$23. For the rest of the month, daily spending averages \$21, then \$20 for the rest of the month. Research has also found a corresponding decline in nutritional intake over the month (Tiehen, Newman, and Kirlin 2017).

A few focus group participants expressed frustration that sales—especially sales on produce—do not seem to line up with SNAP benefit cycles. According to participants, sales on fresh fruits and vegetables often happen the third week of the month, when families' SNAP benefits have been depleted.

9 Food Access Maps: Nutrition

Map 25: Food Deserts and Food Swamps: Fresh Fruits and Vegetables

Whereas rural food deserts typically exhibit an overall dearth of food of any kind, urban food deserts often have low access to supermarkets but ready access to convenience stores and fast food.

Granted, convenience stores *do* generally carry dairy and canned fruits and vegetables, and some even carry fresh or frozen meat (see Master Map for food type availability). Nevertheless, focus group participants said they generally buy snack foods at convenience stores and do primary grocery shopping at supermarkets.

Map 25-A: Retail Assets and Food Type (All Types)

Map 25-B: Retail (Breads and Grains)

Map 25-C: Retail (Fruits and Vegetables)

Map 25-D: Retail (Meat)

Map 25-E: Retail (Dairy)

Map 25-F: Retail (Fresh Snacks)

Some retail locations offer fresh fruits and vegetables as snacks (e.g., hand fruit, carrot sticks) but do not carry a full selection of produce.

FOOD DESERT NUTRITION

People who live in food deserts purchase less healthful food. Large-scale national studies find that food desert residents purchase fewer fruits and vegetables, fewer low-fat dairy products, more red meat, and more diet and non-diet drinks. However, income is a more important predictor than distance in the types of foods a household buys (Rahkovsky and Snyder 2015).

The term “food swamp” has been proposed to describe urban food deserts with limited access to fresh, nutritious food, but abundant access to calorie-dense foods (e.g., fast food or convenience store foods). This term highlights the importance of food *type* in discussions of food access (Rose, Bodor, Hutchinson, and Swalm 2010).

Map 26: Charitable Assets and Nutrition

This map excludes meals that have program-specific eligibility requirements unrelated to income, hunger, or age (e.g., Southeastern Behavioral Health provides food for Clubhouse members and Safe Home provides food for residents, but both are excluded here). It also excludes meals available only during the holidays. The map only shows summer school breakfast and lunch programs as meals (but it also shows all school locations since all serve during the year).

Pantries are not shown separately by food type. Most provide all food groups in shelf stable versions. Feeding SD has cool storage to provide fresh produce, dairy, and meat. Faith Temple and Food To You distribute dairy and meat and fresh produce as possible, and fresh produce along with shelf stable foods are intermittently available at shelters (downtown).

The following subset maps show charitable assets by type of food available:

Map 26-A: BackPack Programs

Backpacks cover major food groups but contain only non-perishable food items.

Map 26-B: Charitable Meals (Bread and Grains)

Map 26-C: Charitable Meals (Fruits and Vegetables)

Includes canned and fresh (e.g., a fruit cup in a lunch bag or fresh fruit at breakfast)

Map 26-D: Charitable Meals (Meat)

Map 26-E: Charitable Meals (Dairy)

10 Detailed Maps

Detail 1: Residential Type

This map provides more detail than the population density map. It shows where residential structures are clustered.

Detail 2: Residential Type Excluding Single Family Dwellings

This map can be used alongside the renter rate map (Map 4) to see where concentrations of renters likely are. Keep in mind that some renter households rent single-family dwellings, and some homeowners live in townhomes, two-family homes, multi-family homes, or manufactured homes.

Detail 3: Residential Type with ½ and 1 Mile Supermarket Buffers

This map adds an additional one-mile buffer around supermarket locations.

11 Focus group findings

Four focus groups were held between October 23 and 29, 2017. In an attempt to reach households from all areas of the city, focus groups were held at public locations throughout the city, including downtown, west central, northeast, and southwest. The west central group was poorly attended, despite having a similar number of people signed up to attend. At least two of those potential participants mentioned that transportation would be challenging for them, so that was a likely barrier to attendance at this group. Compounding transportation barriers might have been scheduling: this was the only group held on a Sunday, when city buses do not run.

In total, 44 respondents participated in focus groups. Participant demographics are shown below.

Table 8. Focus Group Participant Demographics

<u>Gender</u>			
	Male	16	37%
	Female	27	63%
<u>Age</u>			
	18-24	7	16%
	25-39	8	18%
	40-64	23	52%
	65+	6	14%
<u>Race</u>			
	White	24	55%
	Native American	13	30%
	Black	4	9%
	Asian	0	0%
	Multi-racial	1	2%
	Other	2	5%
<u>Ethnicity</u>			
	Hispanic	4	9%
	Non-Hispanic	40	91%
<u>Language</u>			
	English	42	98%
	Other	1	2%
<u>Household size</u>			
	Single adults	15	34%
	Average (all households)	2.43	
<u>Children in household</u>			
	Yes	14	32%
	Average number of children (for households with children)	1.29	
<u>Household income</u>			
	\$0-21,600	40	93%
	\$21,601-36,000	2	5%
	\$36,001-57,600	0	0%
	\$57,601-72,000	0	0%
	\$72,000+	1	2%

12 Overview of Focus Group Findings

“If you go hungry in Sioux Falls, you’re doing something wrong!”

Most participants vociferously agreed that Sioux Falls is rich in charitable food assets. Multiple participants compared Sioux Falls to their experiences in other cities to say that Sioux Falls is much more generous, especially with prepared meals. Those new to Sioux Falls said they were impressed by the way the community provides food to those who need it.¹⁷

Respondents were generally aware of numerous charitable food assets, but not always the particulars of where, when, or how to access them. Participants’ suggestions to improve information sharing included the following:

- Advertising in the *Shopping News*
- Cross-promotion (i.e., posting about Food to You at the Feeding South Dakota food pantry or creating a master food calendar as an insert to the Resource Guide or a separate handout so anyone who finds *one* food asset can easily locate others)
- Using social media in addition to traditional avenues (print and radio) for sharing information

Hours of availability can present a barrier to access. Charitable food assets—especially pantries and giveaways—are more limited during weekends and evenings, so people who work fulltime during the day have fewer opportunities to access food.

Transportation hurdles exist, but are not seen as insurmountable. For participants, overcoming distance—whether it meant gas money or bus fare—was an added expense and inconvenience. Participants said that, for certain populations, transportation could be a more significant barrier (i.e., those with young children, disabled, or elderly).

Informal food sharing and redistribution happens regularly, but most is very local (within an apartment building) or coordinated online over social media (so those without internet access miss out).

¹⁷ As a caveat, those who participated in the focus groups may be more aware of available resources, more attentive to monitoring opportunities for accessing food, or more able to get around to where food is available (after all, they saw the call for focus group participants, responded, and made it to the groups).

Retail Food Access

Where do you shop for groceries?

When asked where they shop for groceries, nearly all participants replied with a supermarket (e.g., Hy-Vee, Sunshine) or supercenter (e.g., Wal-Mart). Their choice of retail location depended on convenience, with most participants shopping at the supermarket closest to home or Wal-Mart if they were there to pay bills. A few participants said they bought food at dollar stores or convenience stores, but said they generally went there only for cheap canned goods (especially soup), milk, or snacks.

To save money, participants said they shop weekend sales or time shopping trips for early in the morning or late at night when products (especially meat) are marked down. Hy-Vee was seen by most participants as more expensive than other stores, aside from sales or clearance items, while Franklin's, Sunshine, and Aldi were mentioned by a few people as cheaper. But wherever they shop, participants said, they choose the cheapest version of products (store brands and generics) and shop clearance sections, day old bakery items, and the like.

When grocery shopping, respondents were intentional and strategic about trying to save money. They described clipping coupons, reading ads, even researching times of year when certain items are more plentiful or trying to see through marketing strategies that steer the unaware toward more expensive products (where cheap products are located and marketed).

There was nearly unanimous agreement among participants that the best way to find out about sales is to check the *Shopping News* (some said Sunday paper, but none said they subscribe). Only two participants said they sometimes look online for sale or coupons, but that they find it a pain to transcribe sales information to paper, and others said they did not have internet access. No one reported using phones to find sales.

Transportation and location matter, but not as much as price

Even for those with transportation, location and convenience are important. Respondents said that traveling farther costs time and gas money—most said they prefer not to drive across town and will instead shop nearby and focus on sales. However, most also said they would make a longer trip if deemed worth it. Traveling farther is seen as worth it if sales are good or prices are much cheaper, and participants said they make the decision to travel based on weekly ads and word of mouth about sales. For many (but particularly those with cars), affordability was the most important factor in determining where to shop, more important than convenience.

To reduce transportation costs, participants said they try to combine trips (e.g., by paying bills at Wal-Mart when shopping).

Hours of operation were not a major factor in choosing where to shop. Wal-Mart was mentioned for being 24 hours, which participants said could be important for parents who need to grab milk, but no one mentioned Hy-Vee being 24 hours or said that other stores' hours were a barrier.

Buying in bulk is tricky, especially for single adults

Some respondents said they buy in bulk or shop warehouse clubs (e.g., Sam's) occasionally, but only if they have the money up front to afford it. Meat was the only food type commonly mentioned for buying in bulk. Those who bought meat in bulk said they would buy large cuts and ask a butcher to break them down (only works at Hy-Vee, Sunshine, Franklin's, not at Wal-Mart because they do not have a butcher) or buy larger packages of cut meat and repackage and freeze extra. Some said they were more likely to

buy shelf stable food products or household goods in bulk than food because they did not want to waste food that went bad before they could eat it.

A few respondents pointed out that, for single adults or small households, buying in bulk and using coupons are not viable strategies. They said dollar stores are good for small households and those who live alone because they sell smaller quantities, which is cheaper for them than buying large quantities in bulk. Some also said they avoid coupons because they just shop for themselves and coupons too often require buying multiples.

Stretch expensive items to make food last

Although buying in bulk was a relatively infrequent strategy, many respondents said they “play games with packaging” by breaking down packages of food into smaller servings to spread it across multiple meals. Respondents also said they try to bulk up meals with starches (potatoes, bread, beans, rice, pasta) to make food stretch further.

Food types and nutrition

“If you’ve got nothing else, you can always make a meal with eggs!”

When discussing the price and availability of different food types, participants seemed most concerned with getting enough protein. There was widespread agreement that meat is the hardest part of a meal to budget: most cost-saving strategies focused on how to obtain meat cheaply and make it stretch further. Eggs were widely praised for versatility and inexpensiveness; more than one focus group lapsed into an enthusiastic discussion of the merits of eggs: “You can eat them at any meal!” “They’re a great source of protein!” “They’re much cheaper than meat!”

Participants said that the types of foods they most often purchase are eggs, milk, meat (hot dogs were mentioned frequently), and cheap starches. Participants reported that fresh meat and fresh fruits and vegetables are the most expensive food types, and some said they have to choose between purchasing one or the other. One participant reflected that sales on fresh fruits and vegetables are ill timed with income streams: produce sales seem to happen the third week of the month, when no one has SNAP or income left.

Shopping for children

“She eats so goofy! She eats different than me and my mother do.”

Participants raising children said they put their kids first, but several said they struggle to buy things that are healthy and affordable and that kids want to eat. Those raising children generally agreed that their kids’ needs and preferences drive their choices at the store. A few said that they choose between meat and milk, and they try to choose based on what they think their kids need more.

KIDS COME FIRST

Food-insecure families typically feed kids first, buffering them from the effects of food insecurity.

National surveys show higher rates of food insecurity among adults than children. However, children in food-insecure households are at increased risk of experiencing food insecurity themselves (Coleman-Jensen, Rabbitt, Gregory, and Singh 2017).

Charitable Food Assets

Pantries or meals

Participants asked to list food assets drew a distinction between food pantries or giveaways and places that provide hot meals, focusing mostly on pantries and giveaways. Prepared meals were more important for those without a place to cook food (e.g., those staying in shelters). Other participants said they were more likely to use pantries.

Meals

The Union Gospel Mission was routinely mentioned as a place to get three meals per day every single day, plus bread available from the Mission store. Bishop Dudley Hospitality House was also mentioned, but less for the lunch served and more because they put out extra fruit and vegetables in the day room (though participants said these foods were often close to rotting). Likewise, the Banquet was mentioned because they put out extra fruit and vegetables (people talked less about their hot meals) and put out meals from the day before to take away.

Only a couple people mentioned lunches and snacks available from the Vet Center at 14th and Cliff.

Feeding South Dakota Food Pantry

“It’s very difficult for me to get out there, but I was amazed at the produce.”

By and far, participants were most familiar with this pantry. It was nearly universally praised for being well organized, well stocked, and a pleasant experience: “We got in there and I was like, Wow! It’s like going to a grocery store! I was excited!”

Participants reported a good selection of food types, especially in the summer (more fruit and salad vegetables), and they said they were impressed with the facility. Several people commented on the walk-in cooler and how nice it is, and participants were also fans of cut up vegetables and fruits or packages of stew vegetables.

Participants acknowledged that transportation to the pantry can be tricky, but they were generally so impressed with the facility they were willing to work it out. One participant called the location “a blessing and a curse,” suggesting that distance meant fewer people loitering in the area, which she said made visits more pleasant. Some participants pointed out that, because they can only go every 90 days, they usually have time to plan for the trip. Participants without cars said they usually find rides from a friend or social worker.

Food to You Mobile Food Pantry

“I’ve heard about it, I just haven’t been able to find them. I don’t know when they are.”

Most participants expressed general awareness of Food to You, but there was significant confusion about where and when this mobile pantry is available. Some confusion may be due to the name: a few participants described it as a delivery service or equated it with the Nightwatch Canteen in the Raven parking lot (“mobile like a van”); others did not associate the name *Food to You* with the churches, but did know that Lutheran churches held a food pantry (many associated the pantry with the particular church but did not connect it to the mobile food pantry: “No, that’s a church, not mobile!”). A good number of participants had heard of Food to You but said they did not go in part because they found the different dates and locations confusing or they felt they did not know the details.

However, those who did report going to a Food to You distribution said they enjoyed taking part in the meal beforehand and the chance to visit with regulars.

Faith Temple Food Giveaway

“I had never seen so many families lined up.”

After the Feeding South Dakota food pantry, the Faith Temple Food Giveaway—held every Friday afternoon at the fairgrounds—was the most widely known pantry or giveaway. Even those new to town had heard of the giveaway, and several participants said they go every Friday. Just a few participants were unaware of the giveaway.

Respondents who went to the giveaway said there is often a long line with a long wait, and the giveaway is difficult to access for people without cars or who cannot get to the fairgrounds early enough to line up.

Salvation Army

The Salvation Army was mentioned by just a few people, mostly for holiday giveaways, but also for evening meals, bread giveaways, and senior boxes.

Faith-based community

Because food may trade off with other parts of the budget, participants often also mentioned (or were excited to learn from others about) hygiene product giveaways at Peace Lutheran (Necessities for Neighbors) and King of Glory (King’s Kloset) and diapers and wipes and baby supplies from Oak Hills Baptist Church.

A couple participants also talked about how their personal relationships with churches had been important sources of social and material support.

Informal secondary mechanisms of food distribution

In addition to pantries, giveaways, and meals, participants described an informal secondary mechanism of food distribution. Several participants said they tried to get as much as they were allowed at a pantry or giveaway, even knowing they would not eat it all (whether because they did not like certain items or could not eat some foods for health reasons). Then they would trade it or hand it off to other families. Some said they put extra food out in their apartment buildings. One participant said she donated extra commodities from her senior box to Children’s Inn. Generally, participants seemed to feel good about being able to give back to their neighbors in this way.

Food types and nutrition

Overall, participants said, food pantries and food giveaways tend to have all of the food groups available, but the most abundant items seem to be junk food, bread, and other carbohydrates.

FOOD SECURITY AND HEALTH

USDA ERS examined data from National Health Interview Survey (NHIS), a national survey by the CDC National Center for Health Statistics, and found that food insecurity is associated with chronic health conditions among working-age adults living at or below 200% of the poverty line: hypertension, coronary heart disease, hepatitis, stroke, cancer, asthma, diabetes, arthritis, chronic obstructive pulmonary disease, and kidney disease (Gregory and Coleman-Jensen 2017).

According to participants, fruits and vegetables (fresh) and meat (fresh) are harder to find (though canned fruits, vegetables, and meats are widely available). Several participants said they use SNAP to buy meat and rely on giveaways and pantries for other food types. Participants also reported that dairy (milk and cheese) can be difficult to find: participants especially wanted more milk for children and cheese to enhance meals (i.e., to add to carbohydrate staples that are cheap or easy to find from pantries).

Participants described dealing with tradeoffs when choosing items at pantries: what will last longer vs. things they need immediately (e.g., need a roll of toilet paper now, but know a bottle of detergent will last longer; hesitant to choose fresh foods they cannot consume quickly enough, especially because they expect them to go bad quickly—see below concerns about food quality).

Barriers and concerns

Information and awareness

Accessing information about food assets can be more difficult for people who have a phone but no data or internet access, and especially for people with no phone at all. According to respondents, much information about food assets is spread over social media, and for those with internet access, Facebook groups and targeted ads are very valuable. But those without internet access miss out. Some participants suggested providers actually increase Facebook visibility with targeted pages that people can follow and real-time posts about availability, but also make more use of traditional media (radio or print).

Language may also pose a barrier.¹⁸ One respondent observed that he often overhears conversations in other languages while standing in line at the Faith Temple Food Giveaway.

Respondents said they find out about food resources by word of mouth, posters or flyers at other service providers (especially Falls Community Health and DSS), the Resource Guide, and 211. According to respondents, word of mouth information sharing is especially important for finding out about opportunities for free food. Often, conversations happen while standing in line (e.g., at the Faith Temple Food Giveaway). For accessing information by phone, most participants were familiar with 211, though some said they talk to people who do not know about the service. A couple respondents said they had even signed up for text messages from 211, and they appreciated the option on the food pantry paperwork to opt in to text messages about food giveaways (though one said the text messages sometimes have incorrect phone numbers).

Cookware and food storage

For participants staying in shelters or without appliances or cookware at home, lack of resources to prepare and store food is a barrier. One participant who was staying at a shelter pointed out that he would have nowhere to prepare food from a pantry, so relies on prepared meals. Other respondents said they visited with others at the Banquet who were eating there because they did not have pots, pans, utensils, or other tools they needed to make food at home.

Respondents were not aware of any existing resource for getting cookware, though one respondent said the Mission thrift store might help. One participant suggested the food pantry ask visitors at intake whether they have pots and pans in order to measure the need, then (if needed) solicit donations of pots and pans and keep them in stock for anyone without.

¹⁸ Note the underrepresentation in focus groups of people who do not speak English at home.

Transportation and location

“It’s not impossible, but sometimes it’s a hard road.”

Transportation was mentioned frequently as a hypothetical barrier, though nearly all participants said they personally were able to drive or find rides when needed. However, respondents pointed out that transportation may be a more significant barrier for the elderly, those with young children, or people with disabilities. They also noted that weather compounds transportation problems, and people who might usually be able to walk to a bus stop or pantry could struggle in the heat or snow.

In talking about transportation, the Feeding South Dakota food pantry was most often mentioned because of the transportation difficulties posed by its location. Participants said they try to go in groups to food giveaways or the pantry because it is expensive to pay for gas or the bus. But sharing rides means paying a price and compromising on schedule. Respondents pointed out no one takes you for free, and they often pay for rides from acquaintances. One person relies on rides from her son, but because he does not get off work until after 5 pm, she cannot go to daytime giveaways. A couple participants were aware of the Center of Hope offering rides to the food pantry, but most were not familiar with this service.¹⁹

Even for assets accessible by bus, participants reported that the amount of food they can carry on the bus is limited by rules: no blocking aisles, and riders must be able to hold everything. Plus, because the bus does not run as late on Saturdays and does not run on Sundays at all, weekend transportation is more difficult (though major pantries are not open then anyway).

One participant said the southwest part of town (near the Western Mall) in particular needs more charitable food assets, and a few others agreed. He said that because no food pantries serve that area, he travels to the nearest Food to You location. It takes him three buses and one hour to get there.

Food quality

“You gotta use it fast, otherwise it will spoil.”

Participants expressed some concern with receiving expired or spoiled food from giveaways and pantries. Participants pointed out that even though food might look fresh, it seemed to spoil or mold quickly (especially fresh fruits and vegetables or breads). Participants found it frustrating to come across expired food and expressed some confusion and disagreement about food safety guidelines (judging by whether a food tasted “off” or whether cans were bulging). To deal with this concern, participants said they would freeze food or make soup or share with others before food spoiled.

Just a few participants reflected that some of the food available at pantries or from charitable meals does not seem as healthful as they would like. But they concluded “it’s better than nothing.”

Timing

Several respondents pointed out that very few charitable food assets (especially giveaways and pantries) are available in the evening or on weekends. Those who work weekdays during the day miss the Faith Temple Food Giveaway and the Feeding South Dakota food pantry. While these respondents thought weekend giveaways would be valuable, others pointed out the lack of bus service on Sundays would make it difficult to access.

¹⁹ In follow-up, the Center of Hope staff explained that rides are available on Wednesdays and Fridays: Wednesday at 12 pm or 2 pm and Friday at 12 pm. They can only take two people per run, but they are rarely full. To sign up, riders must call a day ahead of time.

Identification

A few respondents said that not having adequate ID can be a barrier. However, those who had been without ID for various reasons reported that the food assets they visited had been accommodating and found a way for them to get food until they could find an ID (e.g., allowing an exception or accepting an alternative form of ID).

Shame and pride

Pride was mentioned as a barrier in only one group and by only one participant, though others in the room nodded in agreement.

Participants' Recommendations

Improve information and awareness

Respondents suggested the following ways of improving access to information about existing assets:

- Create a comprehensive list of different food giveaways and their dates, times, and locations—perhaps organized as a calendar. Include a map. Respondents said a calendar and map would be useful additions to the Resource Guide.
- Post information in highly visible locations, including retail stores that many people visit (i.e., grocery stores, gas stations). Even those who knew about and used 211 said they would like to see flyers posted at or near the downtown library, which they saw as a hub of information.
- Print cards and make them available at each place with a list of all the others so people who learned about one giveaway can easily find others (like the Helpline Center's Helping Hand Emergency Resource Guide, but specifically for food, and with more details about pantry or giveaway times and locations).
- List food pantries and giveaways—and their hours and locations—in the *Shopping News* (to which participants turned almost universally for food sales information).
- Use radio to advertise pantries and giveaways.

Access

Although few respondents reported eligibility problems and no one mentioned feeling unwelcome at any charitable food assets, respondents said providers could do more to make people aware of eligibility rules—and especially any exceptions to rules that could increase access (e.g., if participants over a certain age are allowed to visit more frequently). They urged that providers be more proactive about getting the word out and enrolling or accepting people to their maximum eligibility.

A few respondents said schools—and especially school counselors—can help families access what they need or find out about resources they might be unaware of.

Cooking utensils and appliances

Respondents said providers could do more to publicize the availability of cooking utensils and appliances (or vouchers for the same) if they are available now. Or, if they are not, providers could make vouchers available for thrift stores for appliances or cookware. One respondent said she would like to see the Angel Tree (or a similar program) for families to ask for and get things they need, such as cookware, not just Christmas trees and gifts.

Pet food

Several participants said pet food is a need, especially for people with companion animals for health or wellbeing reasons. They said they rarely saw pet food at the food pantry and thought a pet food donation drive would be very valuable. No one mentioned AniMeals on Wheels

Gardens

“It’s nice to have the fresh herbs. As much as you can grow, it’s nice to have. It freshens things up and makes it taste better.”

Only mentioned by a couple people, gardens seem to appeal to a certain subset of the community. One participant said that having more community gardens available might be nice, either to grow his own food or to get together as a group and grow food; another said that in her experience plots are quickly snatched up by current plot holders and not available for the community. A third participant said finding seeds for herbs and vegetables at the food pantry was a pleasant surprise and she loved growing her own to have fresh produce. No one mentioned that there is a fee for community garden plots or that they might not be accessible to all neighborhoods.

Food delivery

“They could deliver food.”

When asked how they thought providers could improve food access, respondents in several groups proposed food pantry delivery. However, respondents were split on whether they would like to pick their own food or whether delivery would be beneficial and convenient. Most participants agreed delivery would be most important for the elderly or disabled.

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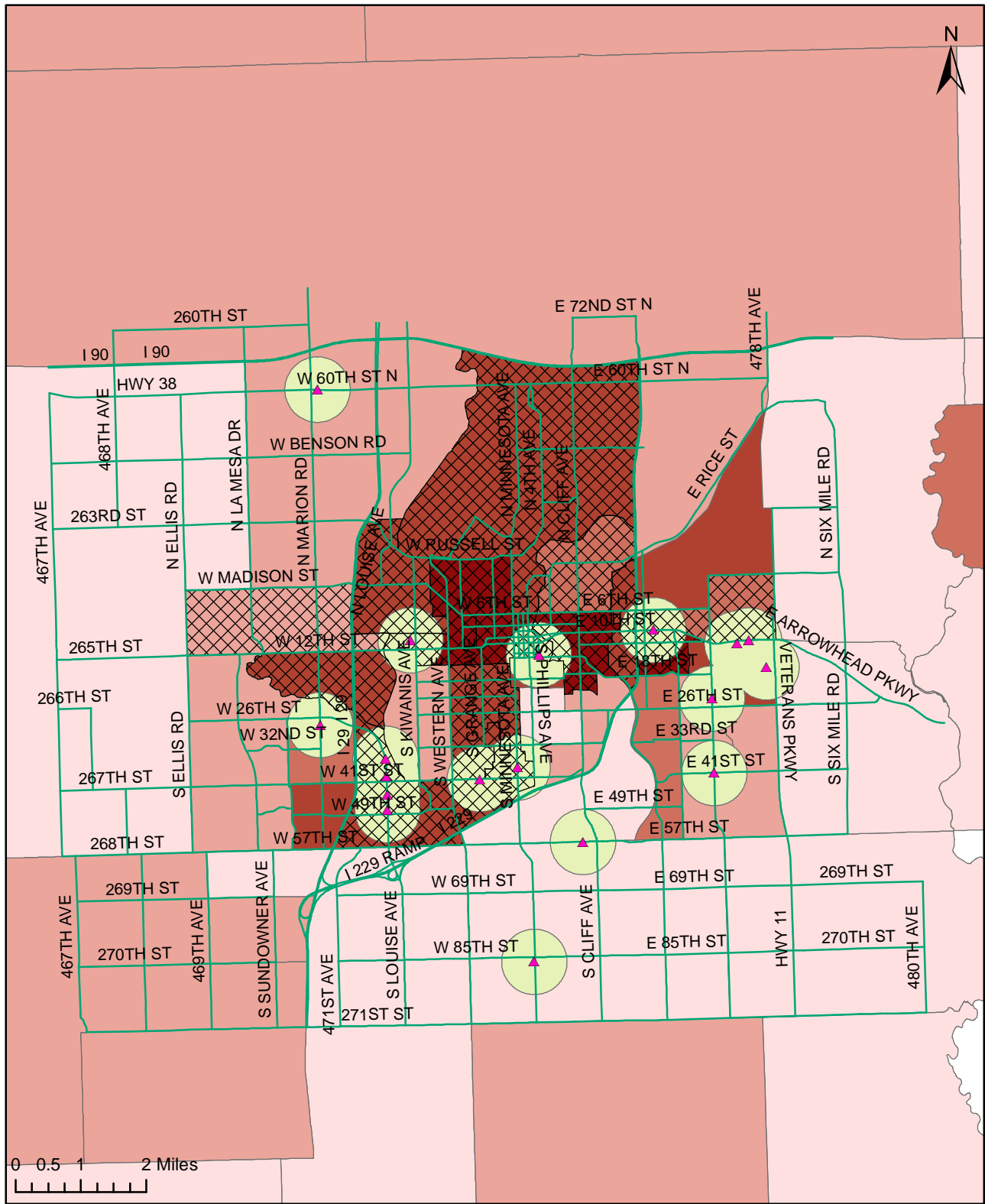
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Appendix: Maps

Sioux Falls Food Security (2017)

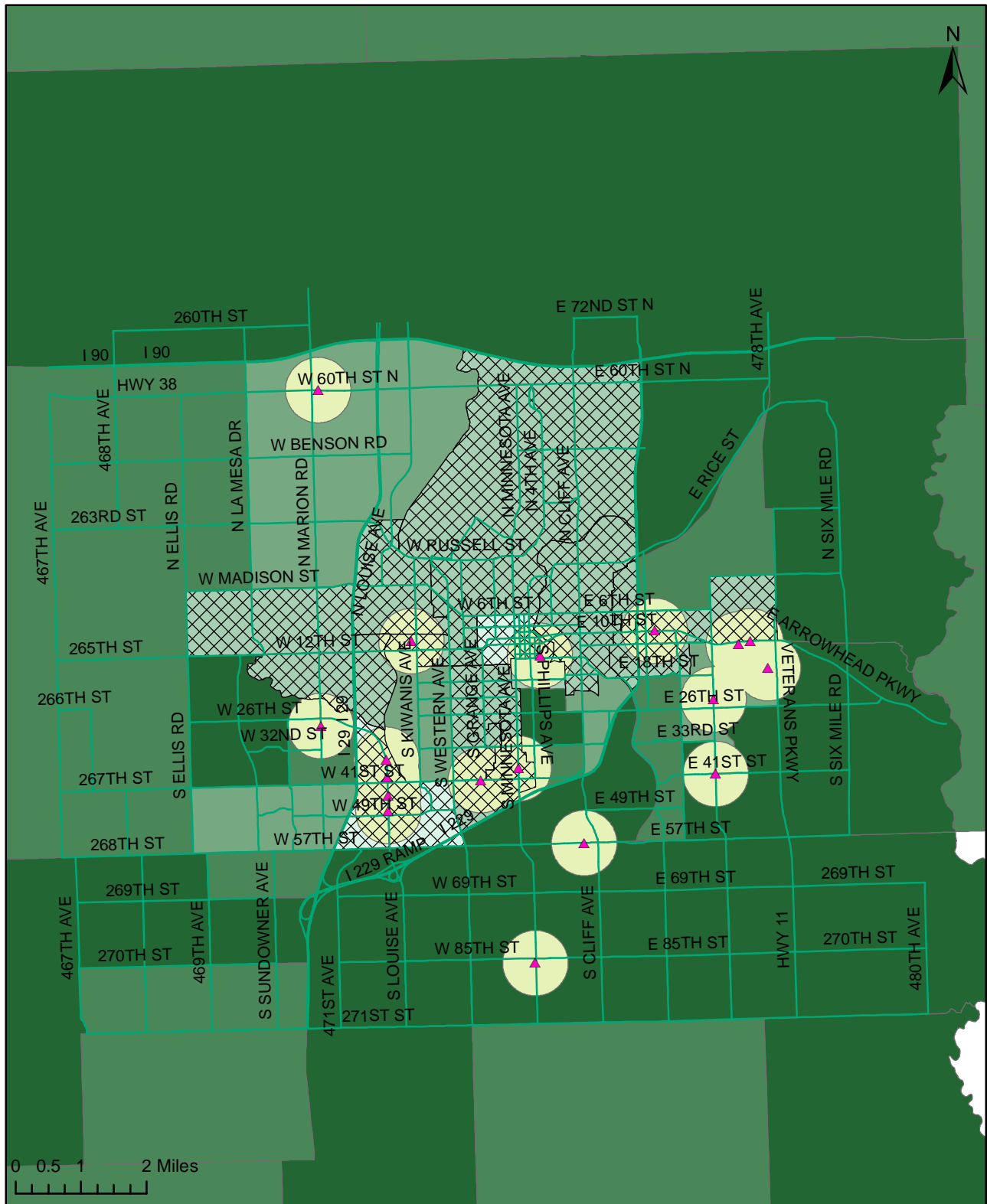
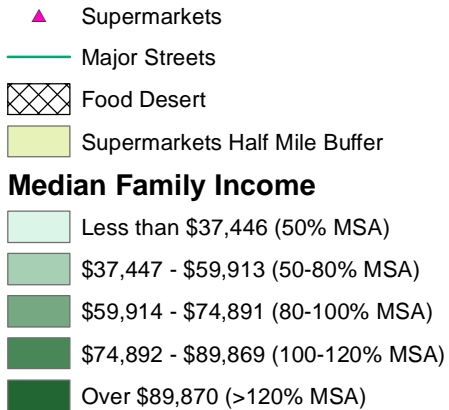
Map 1:
Food Deserts and Poverty

- ▲ Supermarkets
 - Major Streets
 - Food Desert
 - Supermarkets Half Mile Buffer
- Poverty Rate**
- Less than 5%
 - 5% - 10%
 - 10% - 15%
 - 15% - 20%
 - Over 20%



Sioux Falls Food Security (2017)

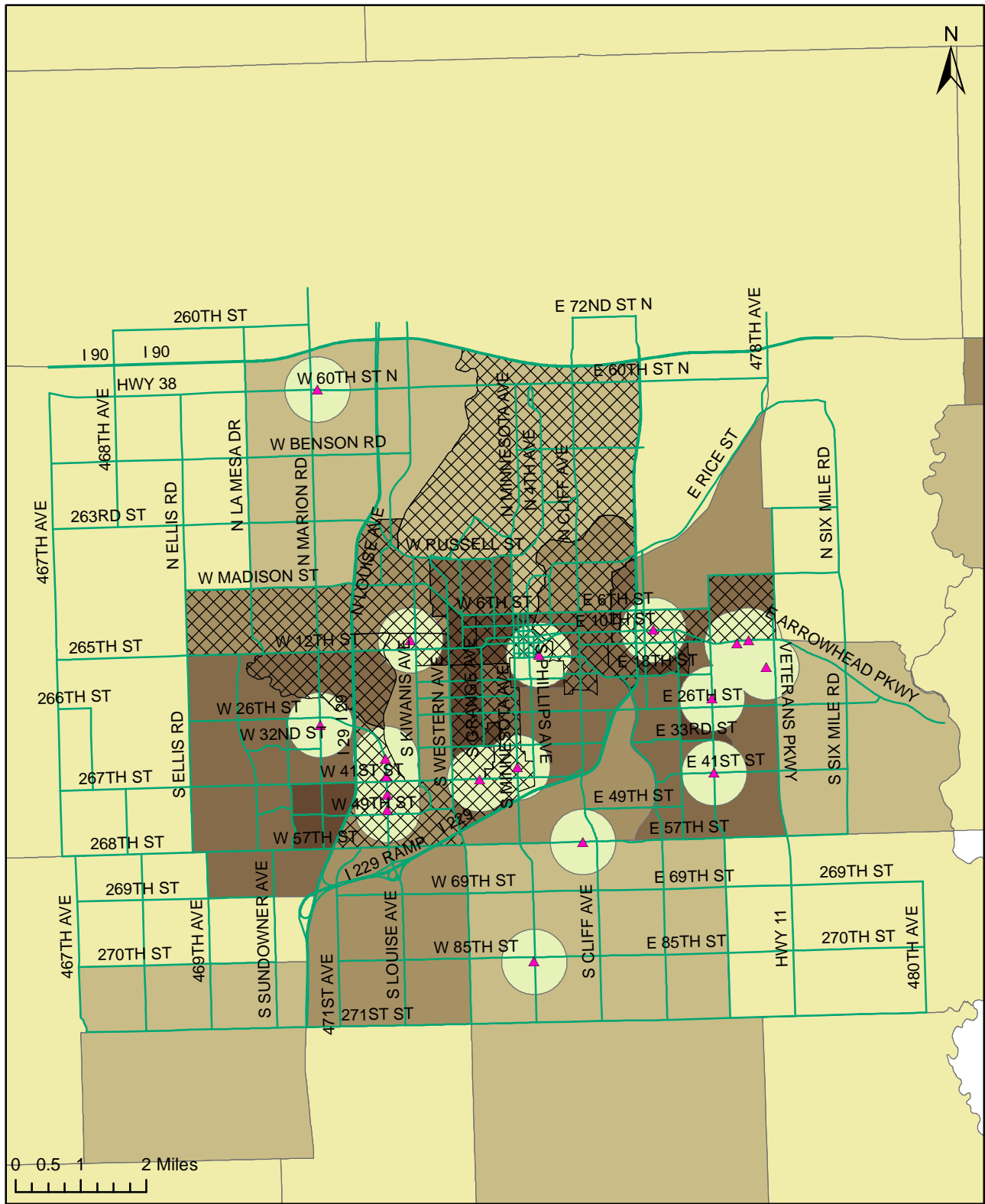
Map 2:
Food Deserts and
Median Family Income



Sioux Falls Food Security (2017)







**Map 3:
Food Deserts and Population Density**

- ▲ Supermarkets
 - Major Streets
 - Food Desert
 - Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
- 0.5 - 237 per sq mi
 - 237 - 1,025 per sq mi
 - 1,025 - 2,677 per sq mi
 - 2,677 - 4,444 per sq mi
 - 4,444 - 7,434 per sq mi








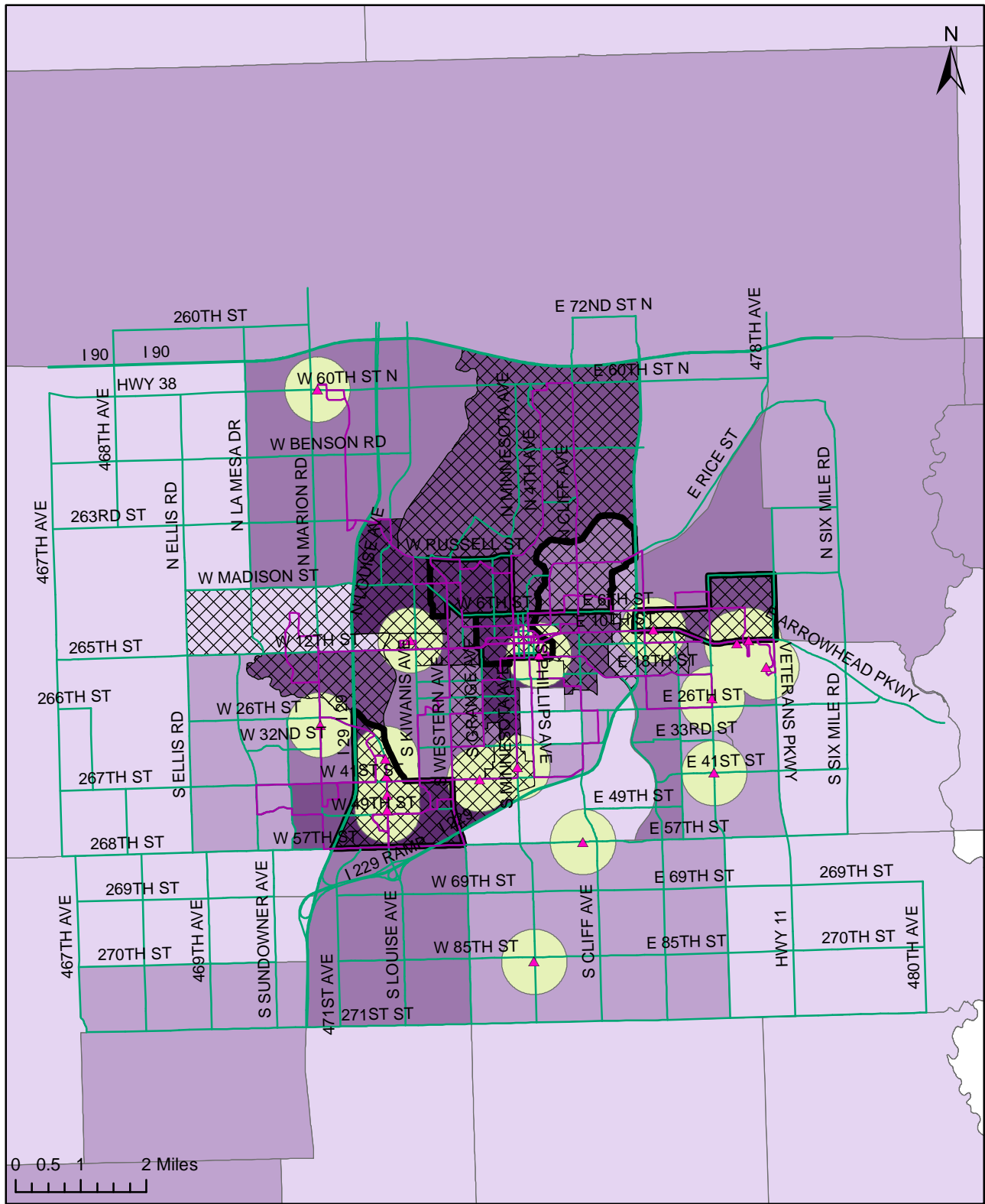
Sioux Falls Food Security (2017)

Map 4:
Food Deserts and Renters

-  Supermarkets
-  Bus Routes
-  Major Streets
-  Food Desert
-  Low Vehicle Access
-  Supermarkets Half Mile Buffer











Renter Households (%)

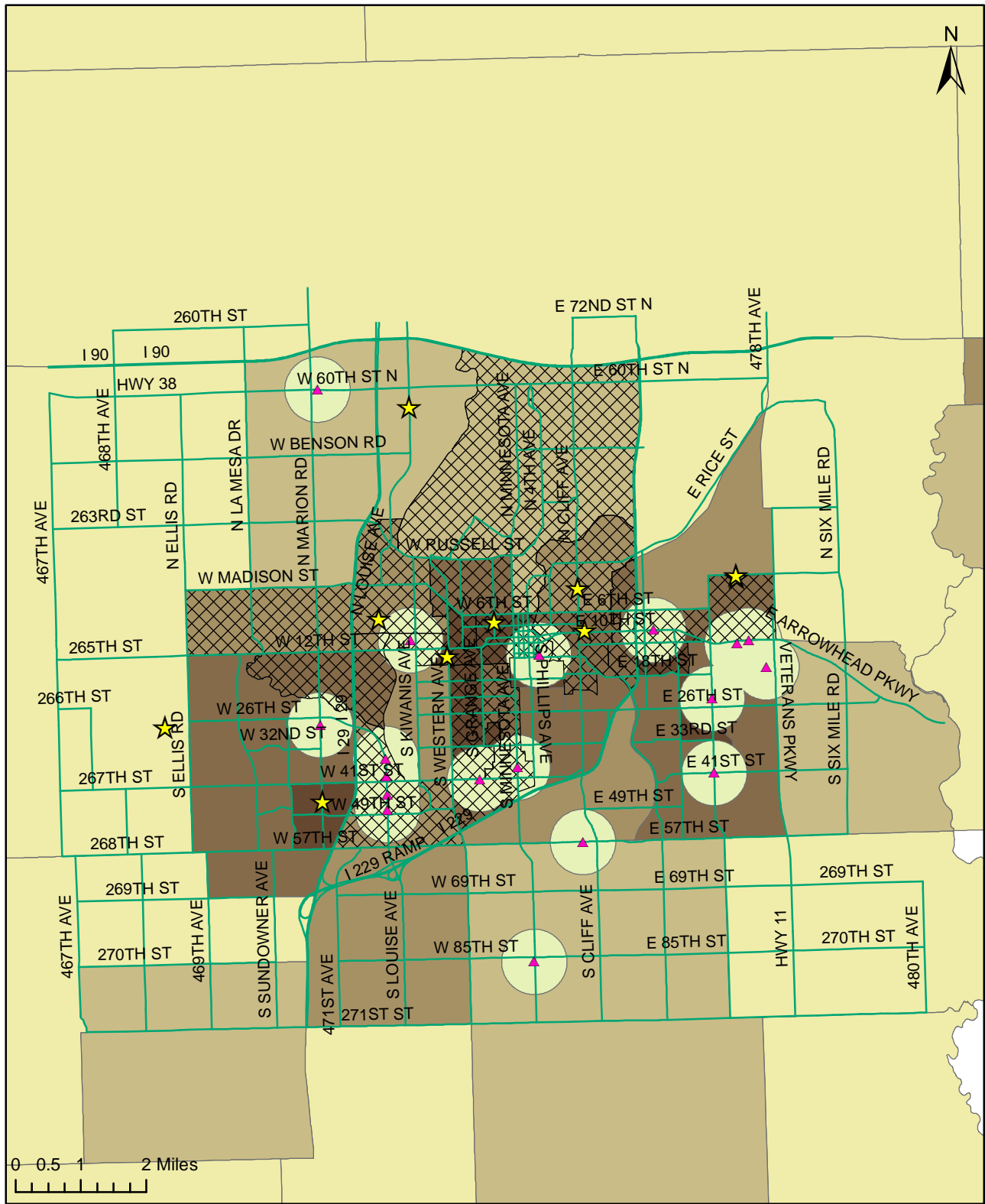
-  Less than 15%
-  15% - 30%
-  30% - 45%
-  45% - 60%
-  Over 60%



Sioux Falls Food Security (2017)






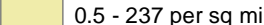
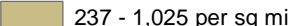
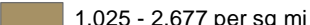
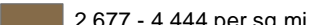
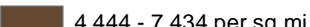
**Map 5:
Food Deserts and Population Density
Pantries and Giveaways**

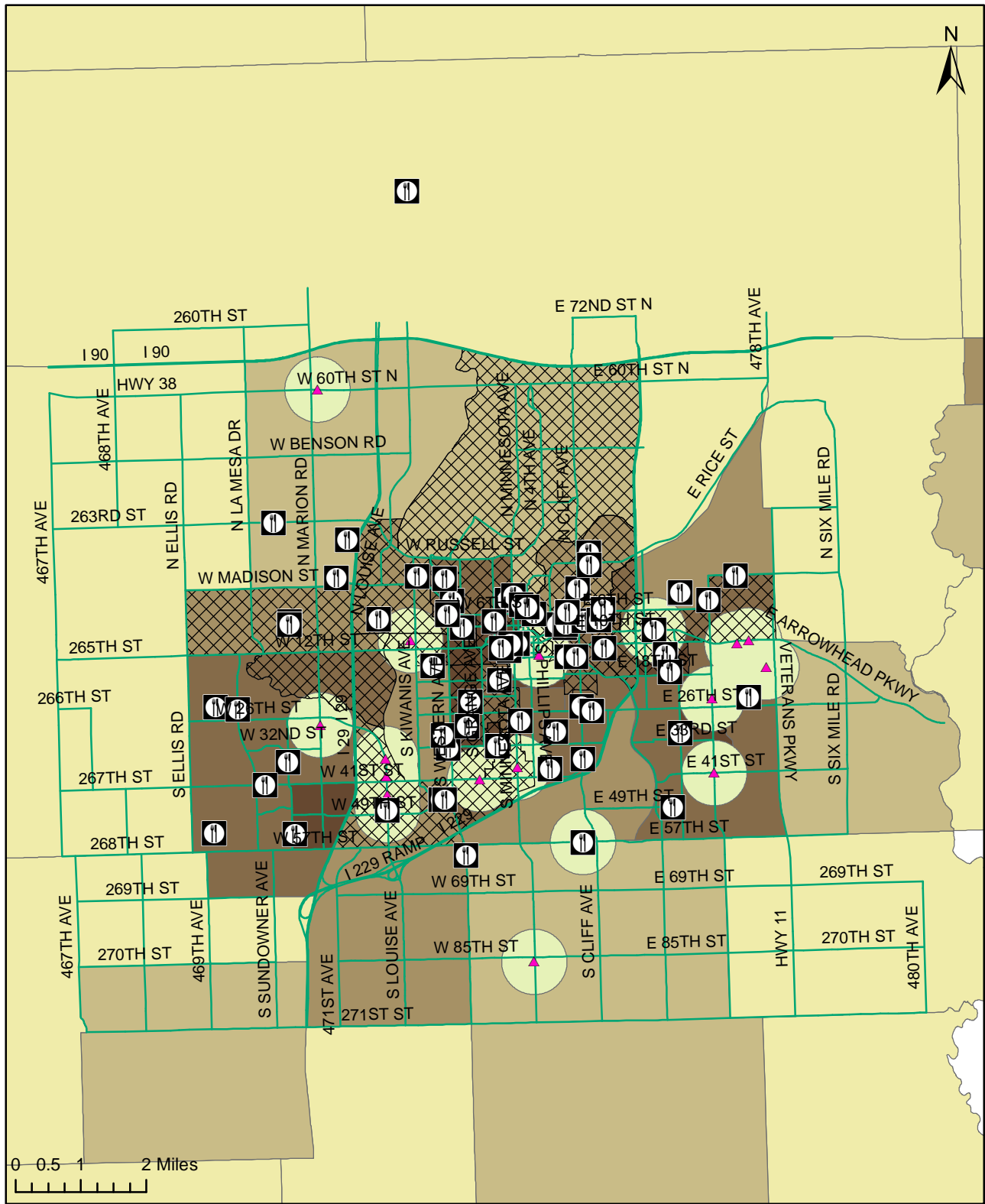
-  Pantries and Giveaways
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
-  0.5 - 237 per sq mi
 -  237 - 1,025 per sq mi
 -  1,025 - 2,677 per sq mi
 -  2,677 - 4,444 per sq mi
 -  4,444 - 7,434 per sq mi



Sioux Falls Food Security (2017)

Map 6:
Food Deserts and Population Density
Charitable Meals

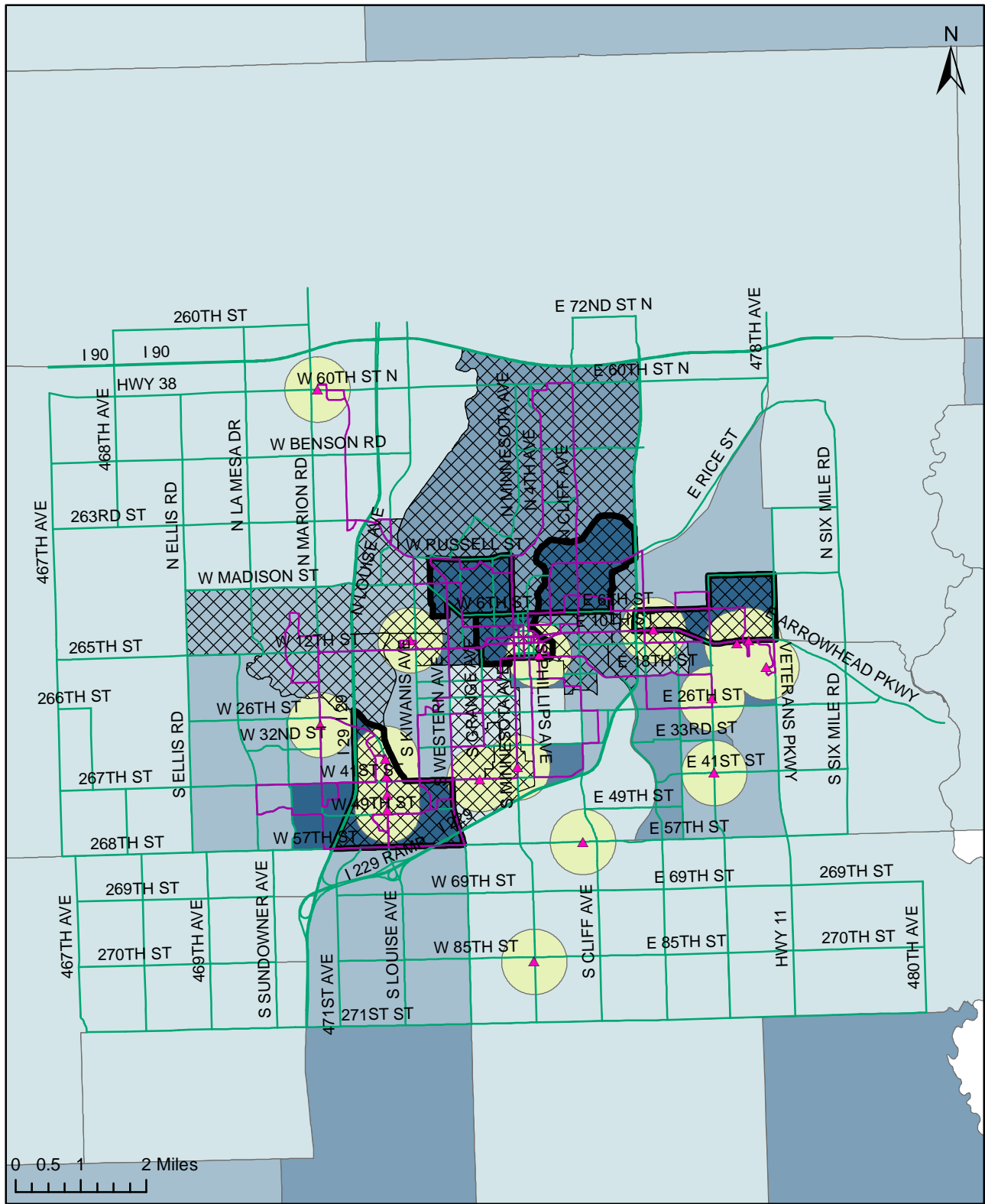
-  Charitable Meals
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
-  0.5 - 237 per sq mi
 -  237 - 1,025 per sq mi
 -  1,025 - 2,677 per sq mi
 -  2,677 - 4,444 per sq mi
 -  4,444 - 7,434 per sq mi



Sioux Falls Food Security (2017)

**Map 7:
Vehicle Access**

- ▲ Supermarkets
 - Bus Routes
 - Major Streets
 - Food Desert
 - Low Vehicle Access
 - Supermarkets Half Mile Buffer
- Households with No Vehicle (%)**
- Less than 2%
 - 2% - 5%
 - 5% - 7%
 - 7% - 12%
 - Over 12%



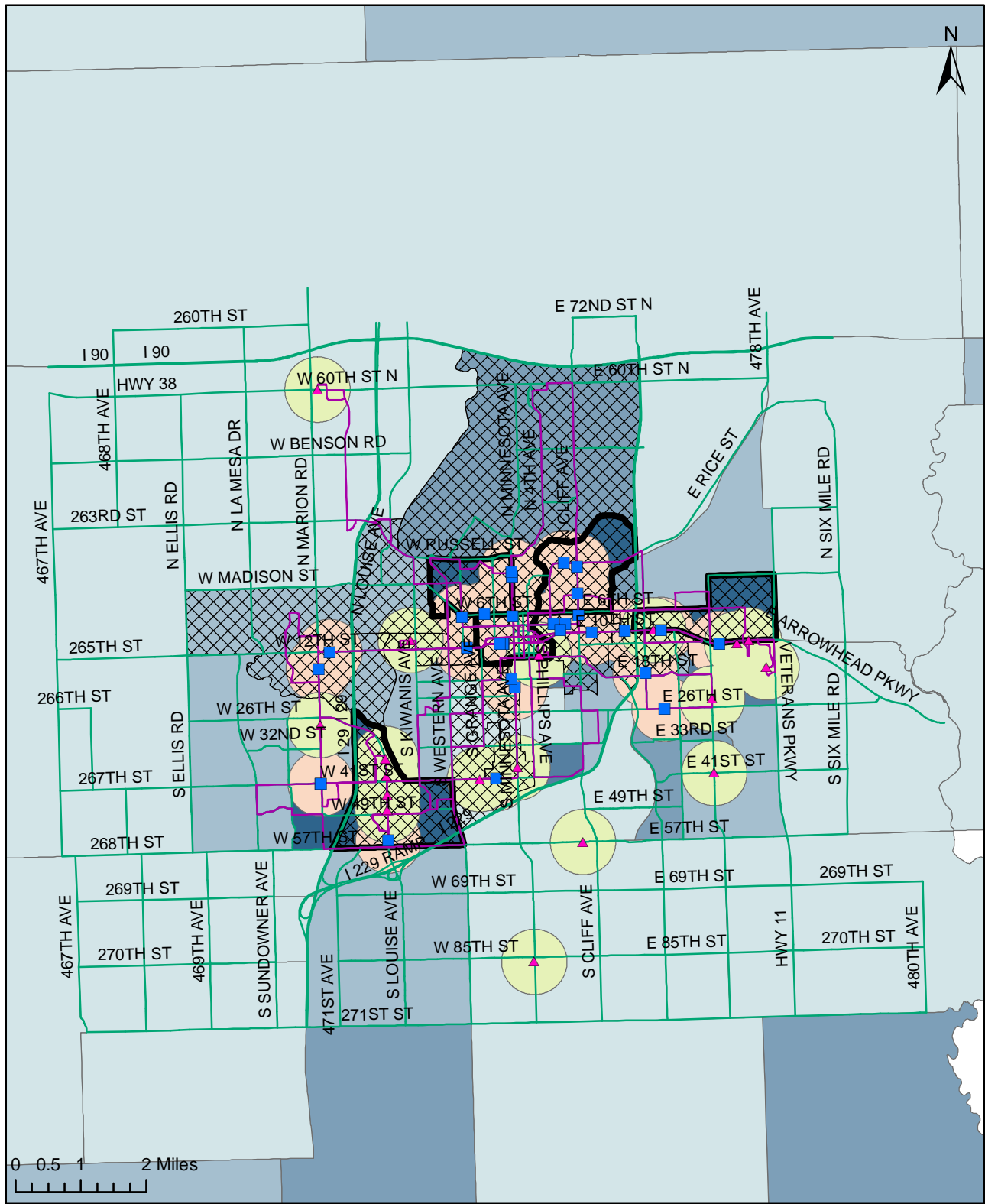
Sioux Falls Food Security (2017)

**Map 8:
Small Grocery Stores and Food Access**

- Small Grocery Stores
- ▲ Supermarkets
- Bus Routes
- Major Streets
- Food Desert
- Low Vehicle Access
- Supermarkets Half Mile Buffer
- Small Grocery Stores Half Mile Buffer

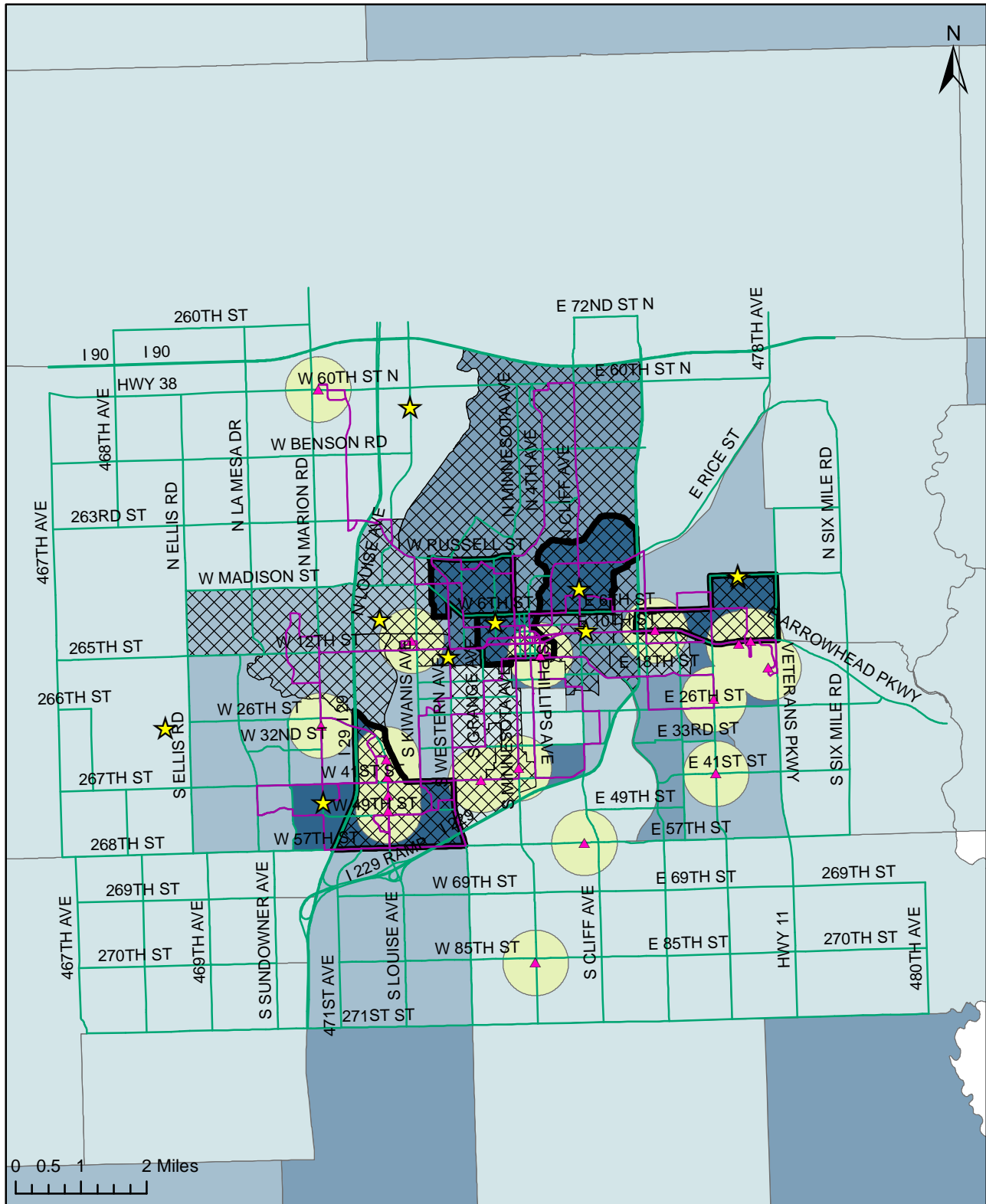
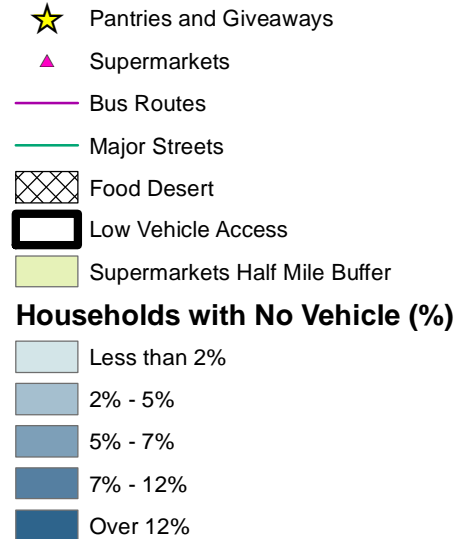
Households with No Vehicle (%)

- Less than 2%
- 2% - 5%
- 5% - 7%
- 7% - 12%
- Over 12%



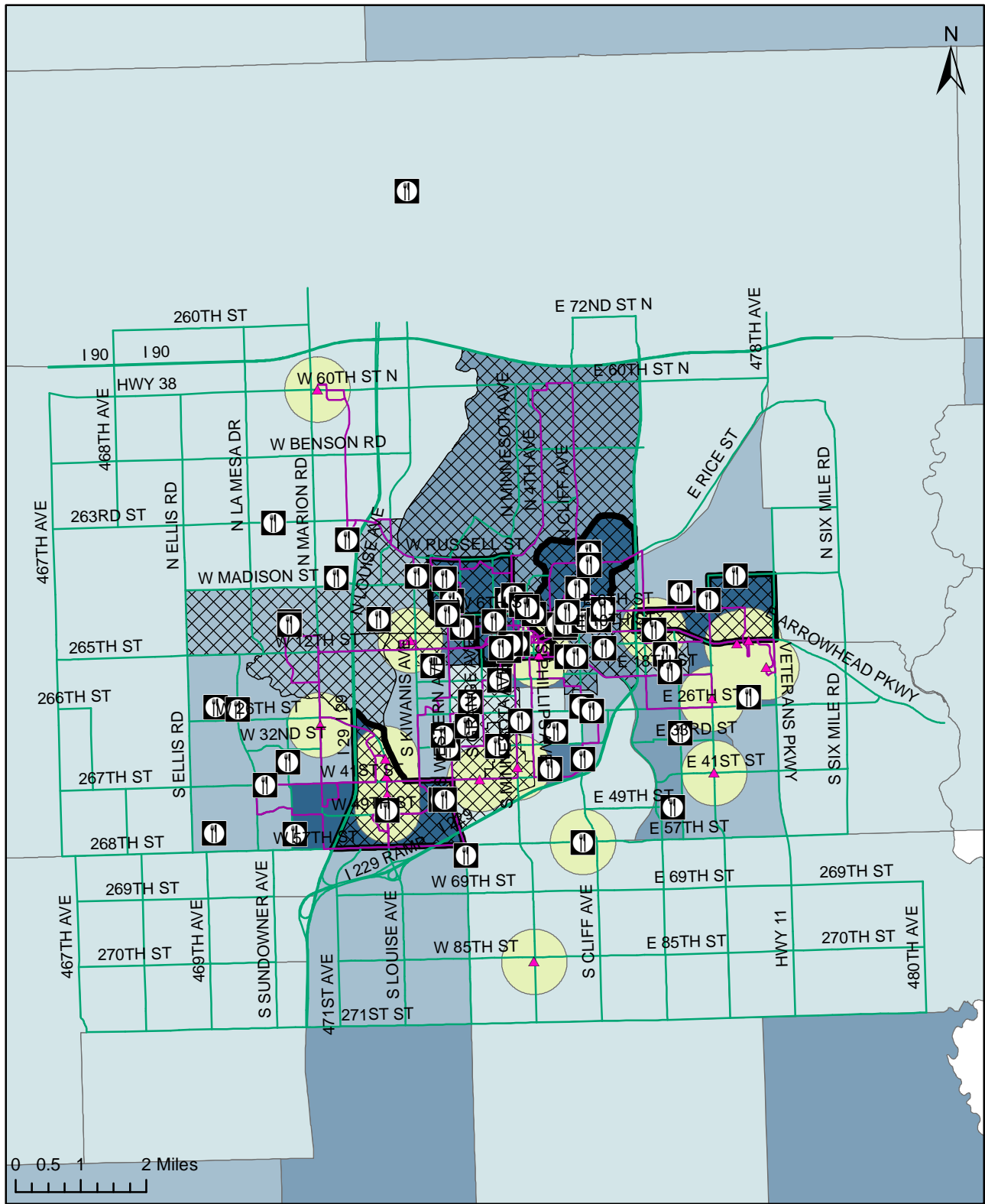
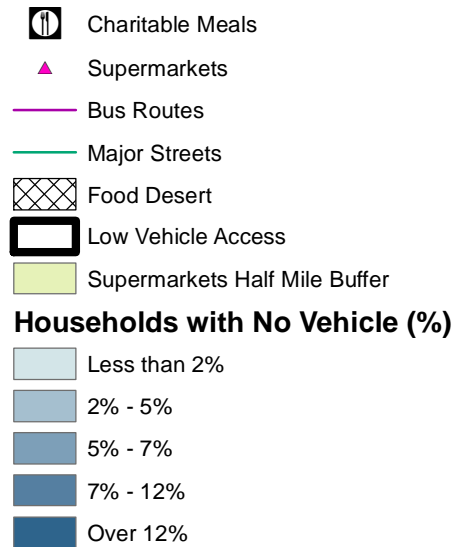
Sioux Falls Food Security (2017)

Map 9:
Pantries, Giveaways,
and Vehicle Access



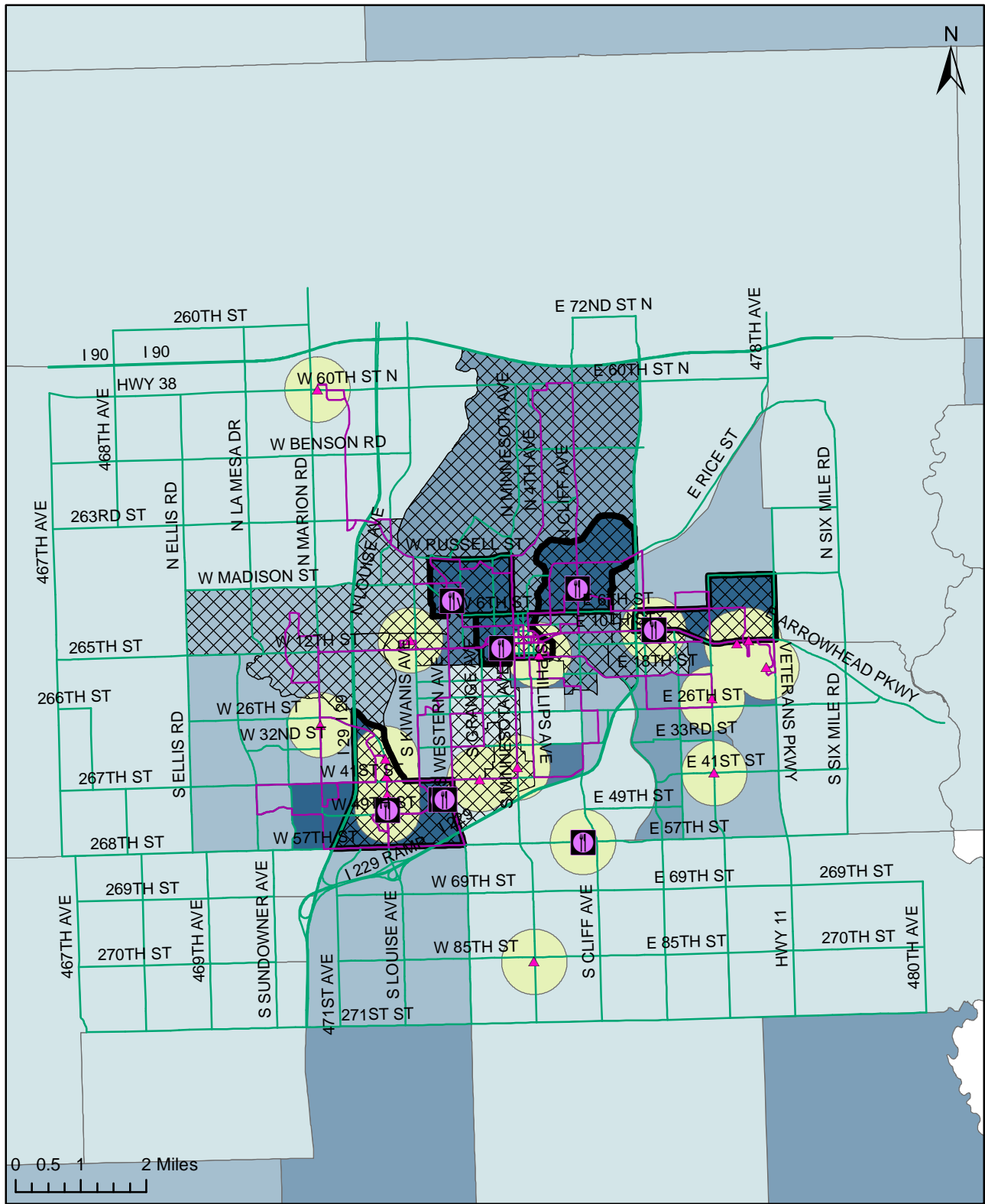
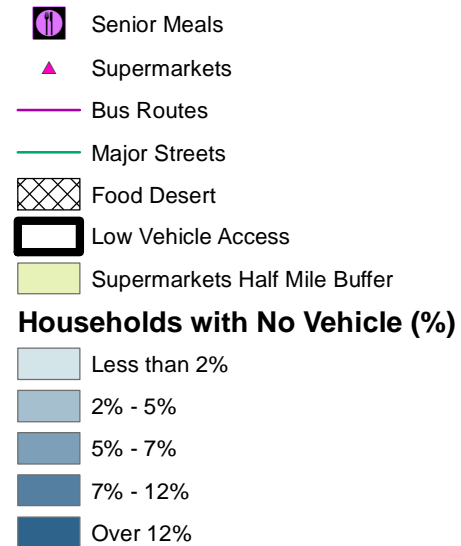
Sioux Falls Food Security (2017)

Map 10:
Charitable Meals and Food Access
















Sioux Falls Food Security (2017)

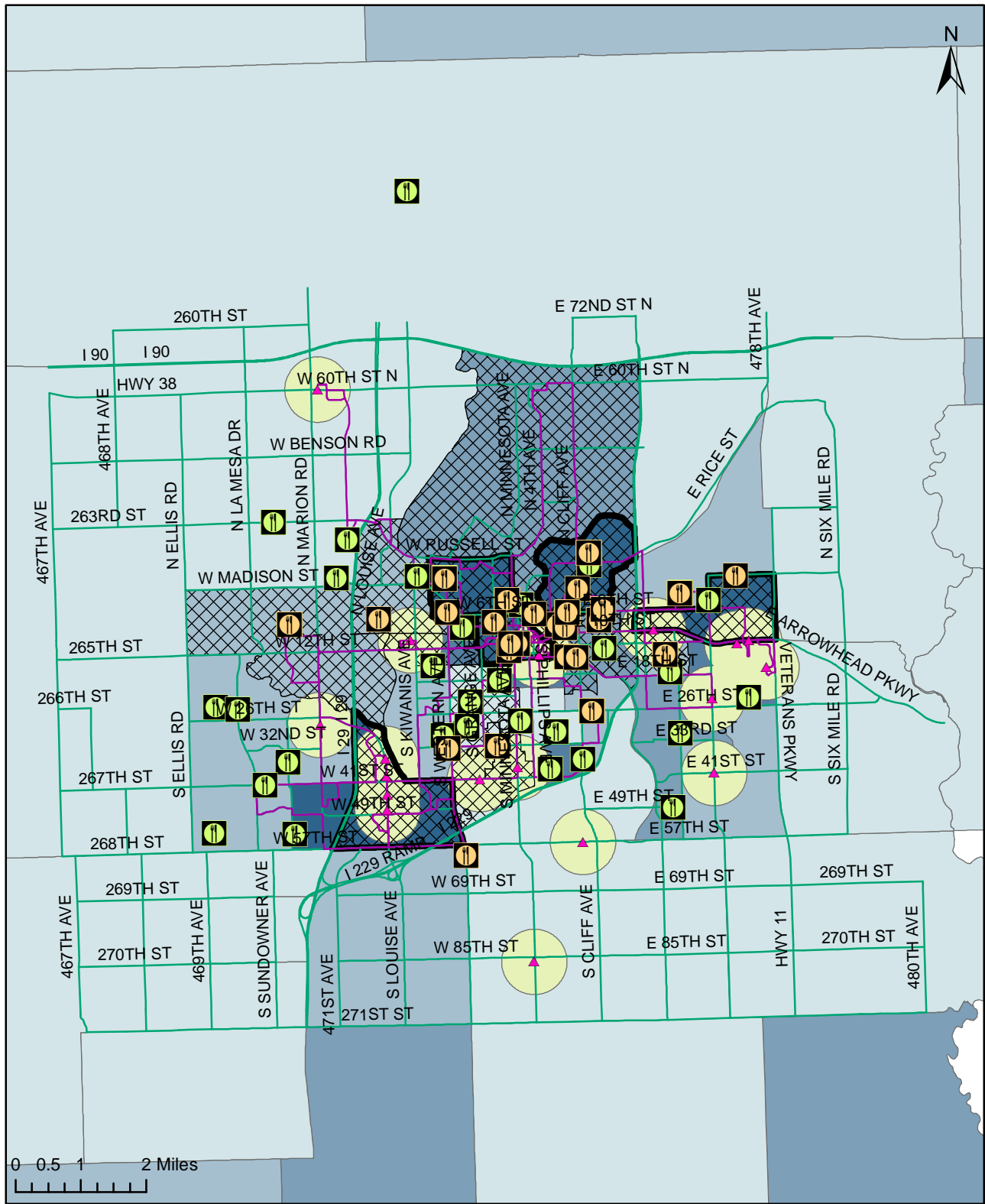
Map 11:
Senior Meals and Food Access



Sioux Falls Food Security (2017)













**Map 12:
Youth and Family Meals
and Food Access**

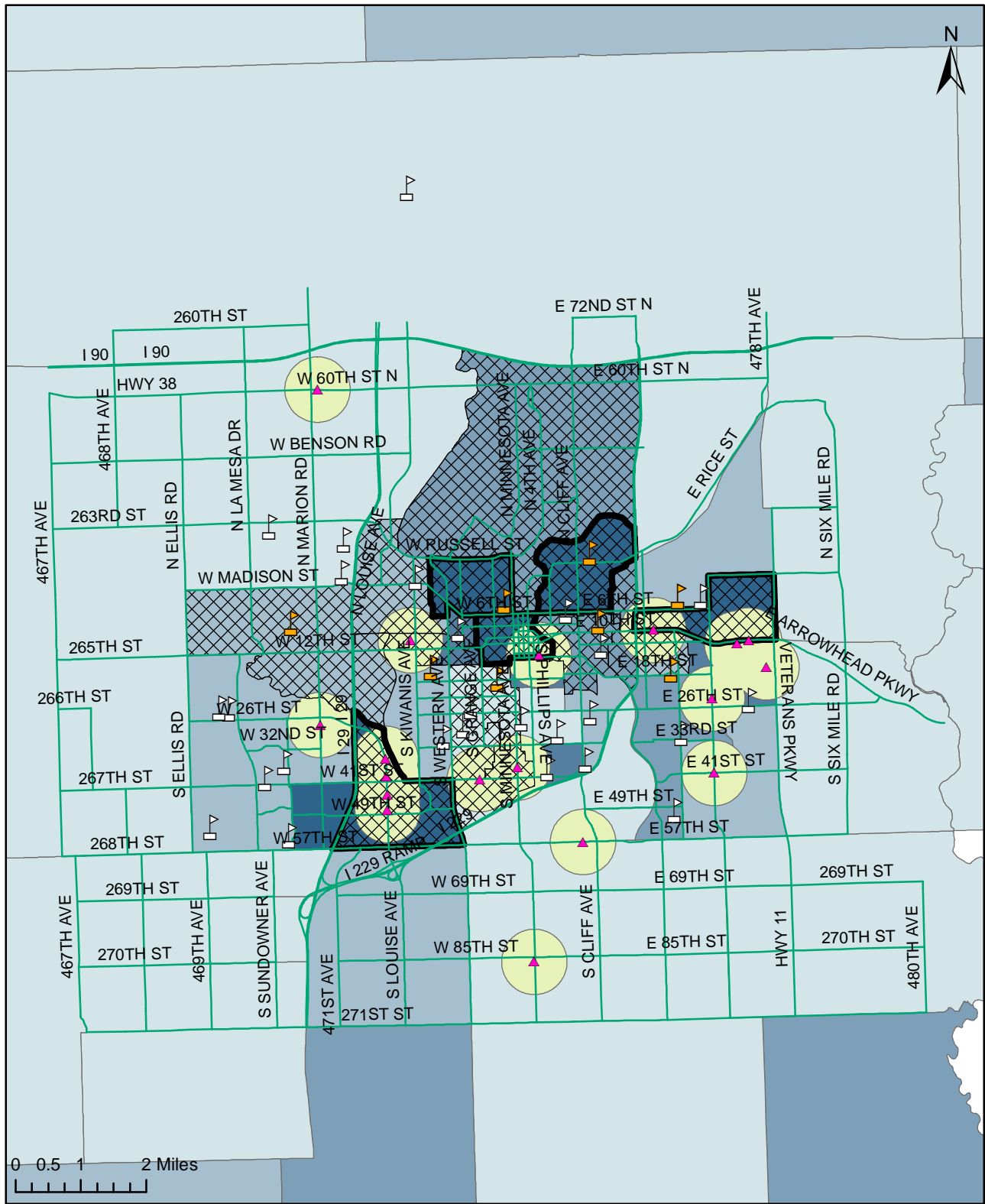
-  Family Meals
 -  Youth Meals
 -  Supermarkets
 -  Bus Routes
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Households with No Vehicle (%)**
-  Less than 2%
 -  2% - 5%
 -  5% - 7%
 -  7% - 12%
 -  Over 12%



Sioux Falls Food Security (2017)









**Map 13:
Schools and Food Access**

-  Title I Schools
 -  Sioux Falls Public Schools
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Households with No Vehicle (%)**
-  Less than 2%
 -  2% - 5%
 -  5% - 7%
 -  7% - 12%
 -  Over 12%








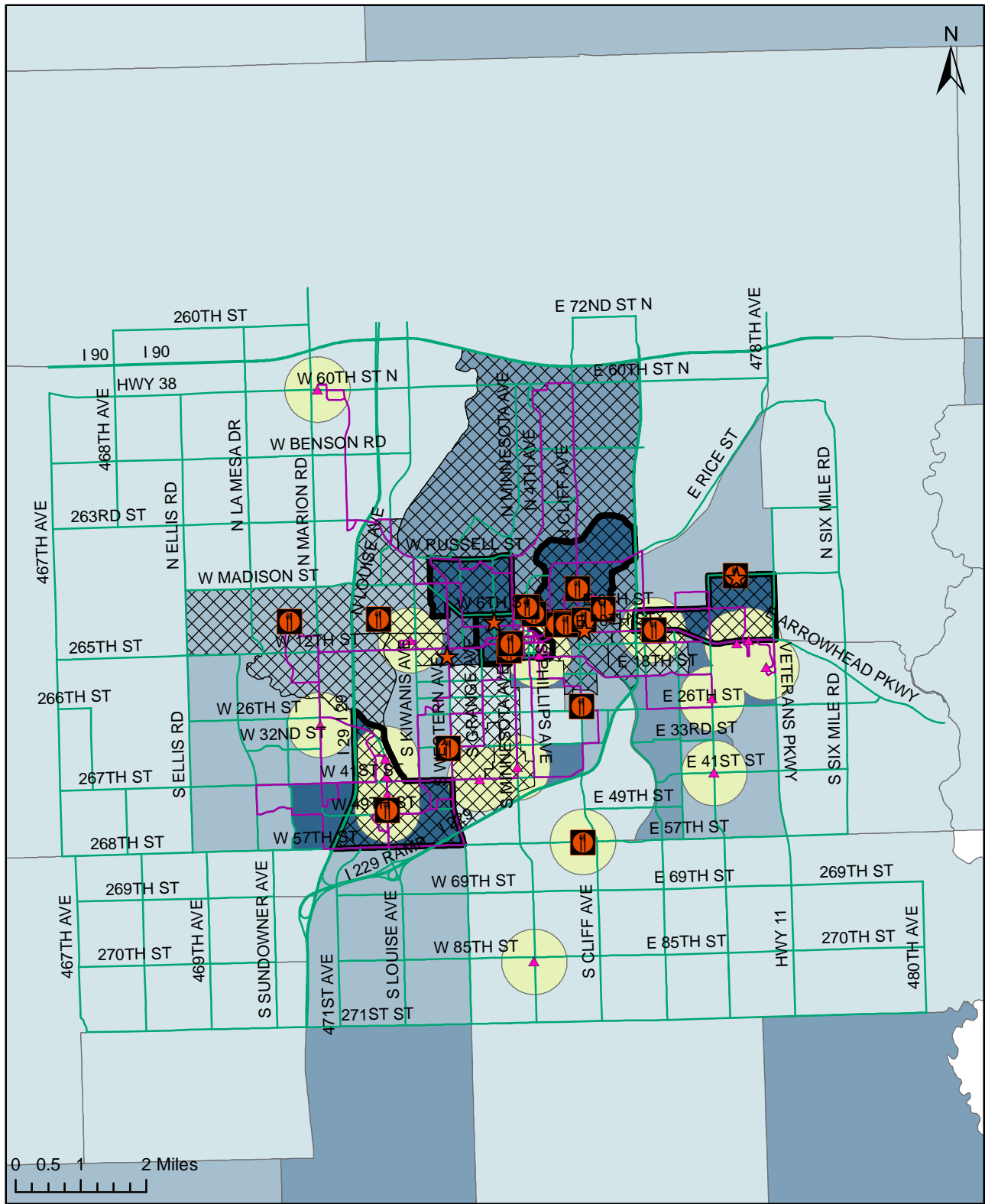
Sioux Falls Food Security (2017)

Map 14: Evening and Weekend Food Access

-  Evening/Weekend Pantries and Giveaways
-  Evening/Weekend Meals
-  Supermarkets
-  Bus Routes
-  Major Streets
-  Food Desert
-  Low Vehicle Access
-  Supermarkets Half Mile Buffer












Households with No Vehicle (%)

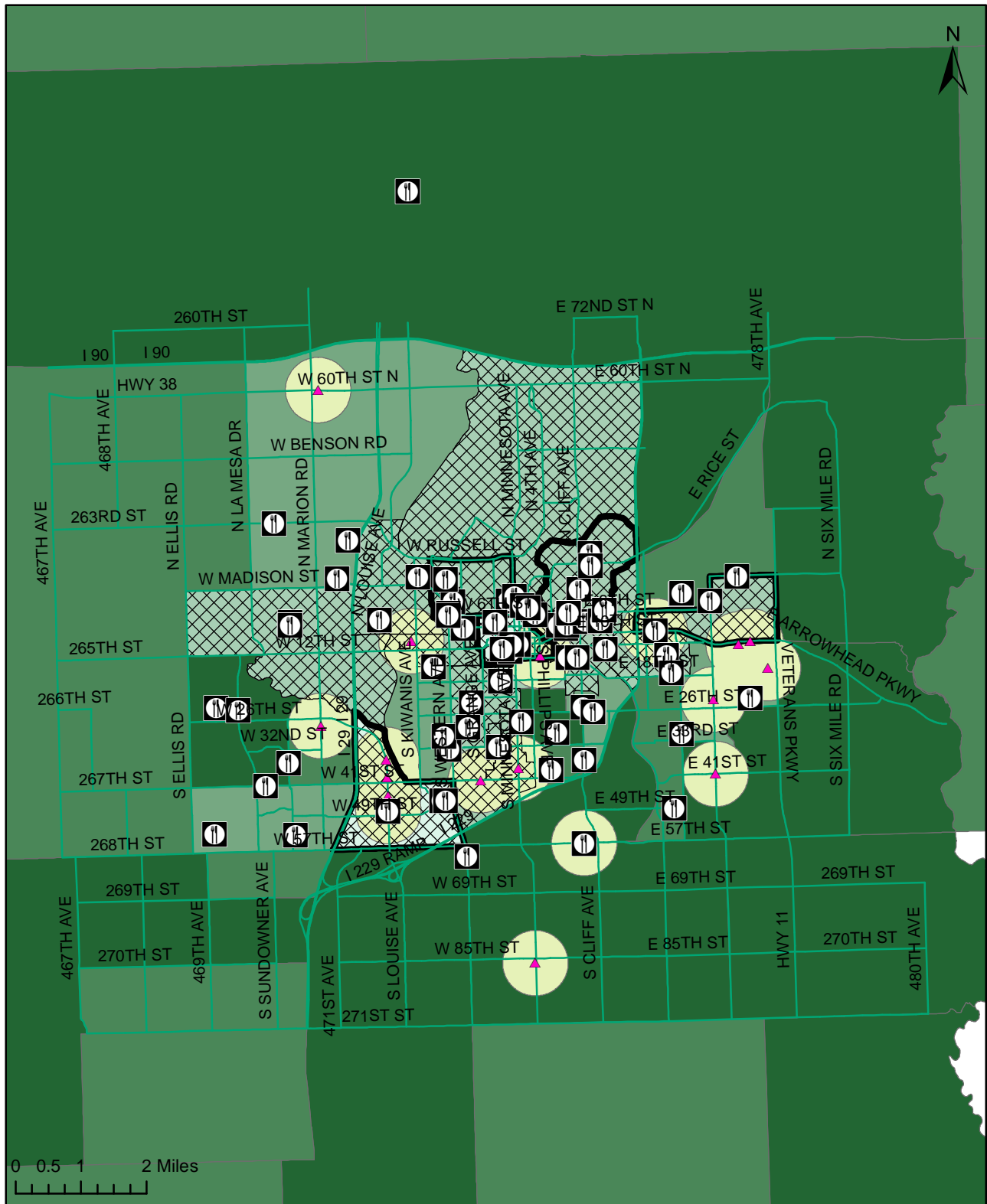
-  Less than 2%
-  2% - 5%
-  5% - 7%
-  7% - 12%
-  Over 12%



Sioux Falls Food Security (2017)

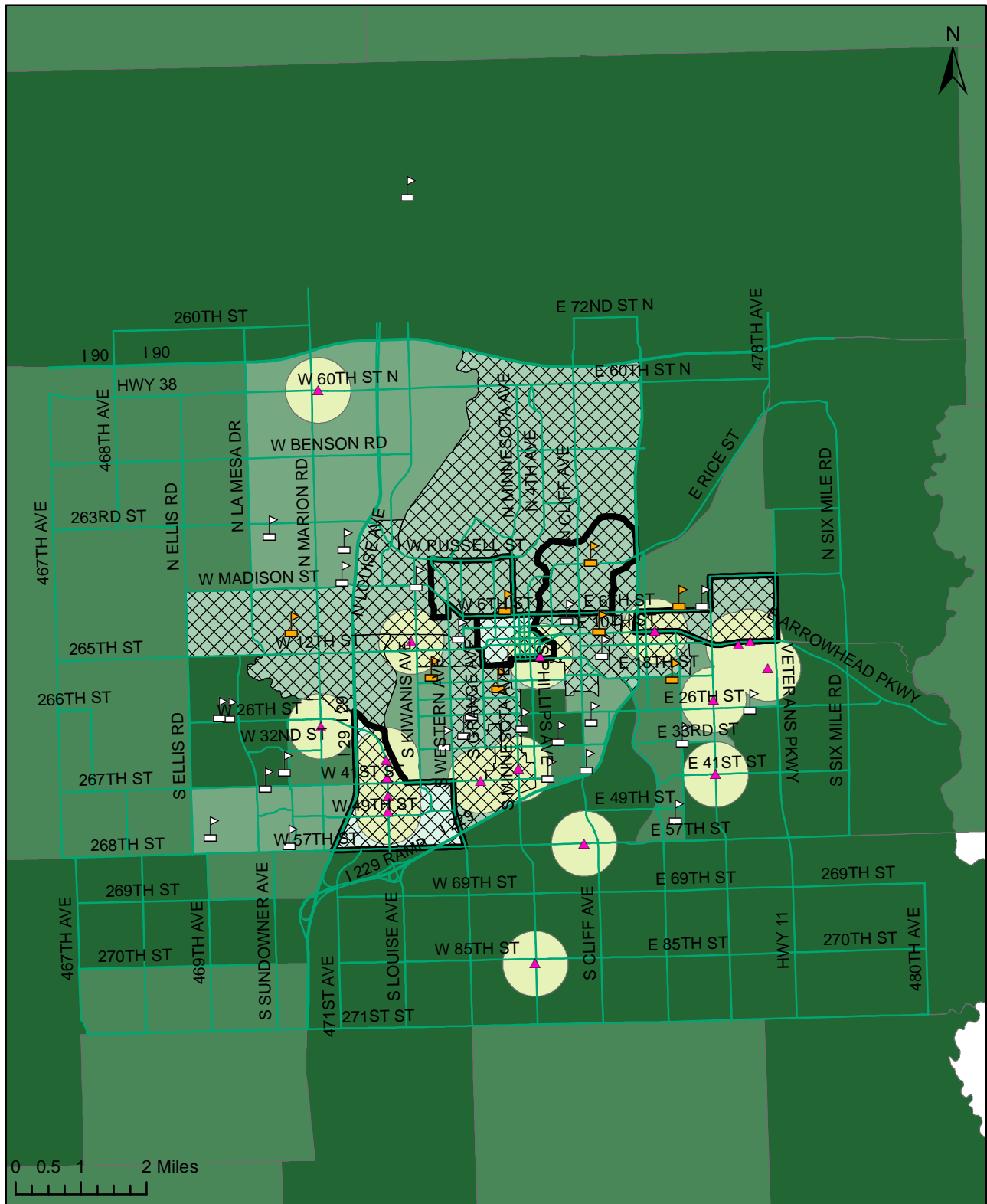
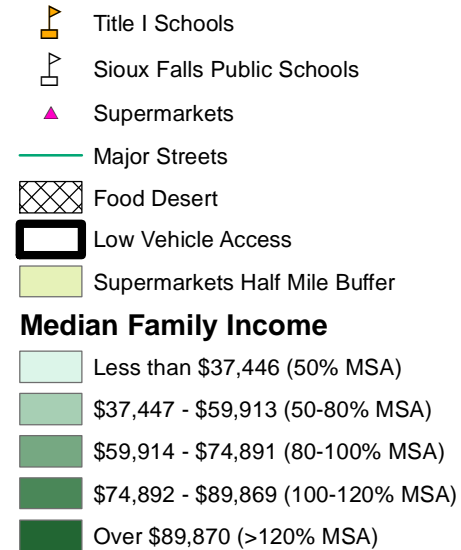
Map 16:
Median Family Income
Charitable Meals

-  Charitable Meals
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Median Family Income**
-  Less than \$37,446 (50% MSA)
 -  \$37,447 - \$59,913 (50-80% MSA)
 -  \$59,914 - \$74,891 (80-100% MSA)
 -  \$74,892 - \$89,869 (100-120% MSA)
 -  Over \$89,870 (>120% MSA)














Sioux Falls Food Security (2017)

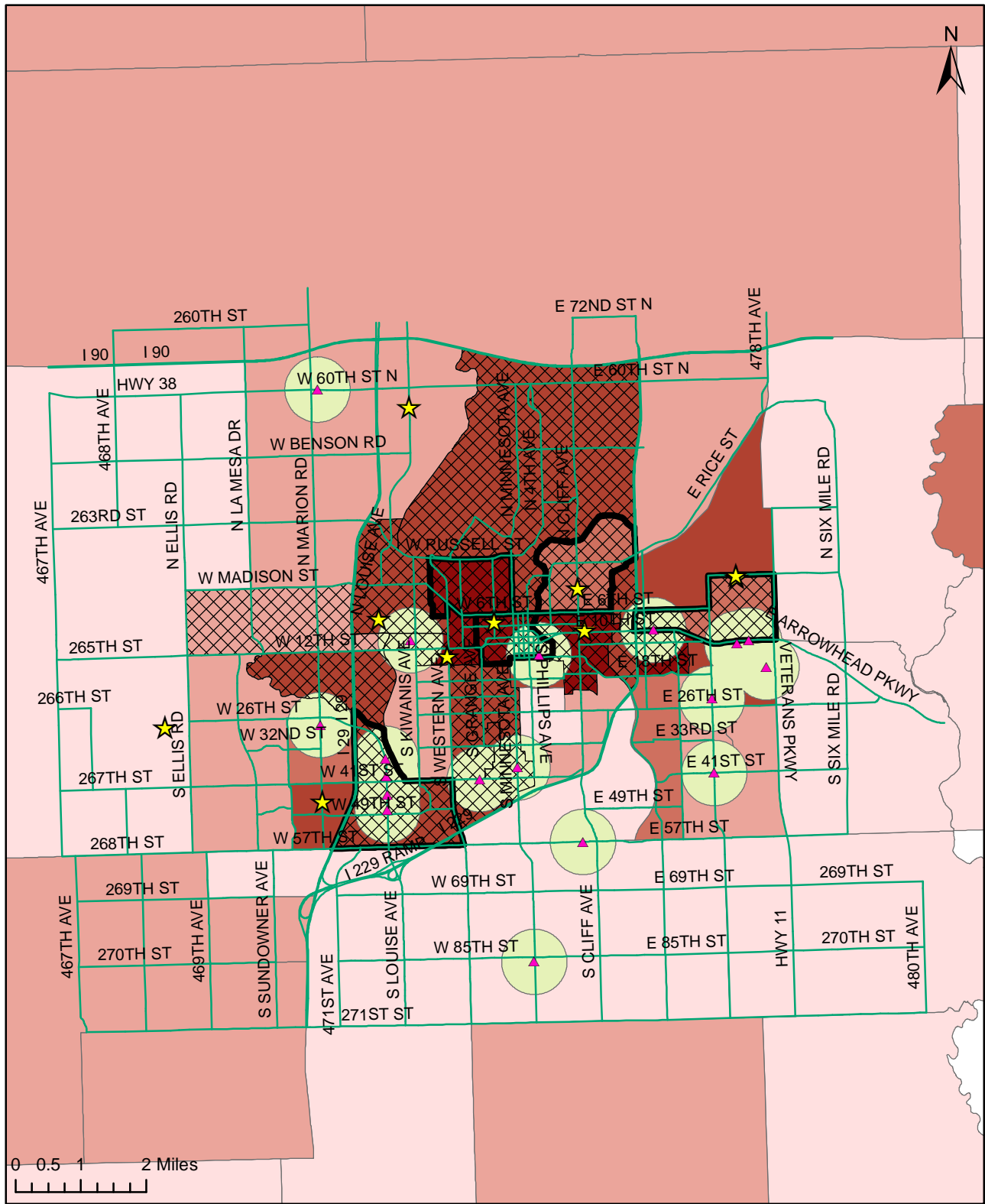
Map 17:
Median Family Income
and Public Schools



Sioux Falls Food Security (2017)












**Map 18:
Poverty, Pantries, and Giveaways**

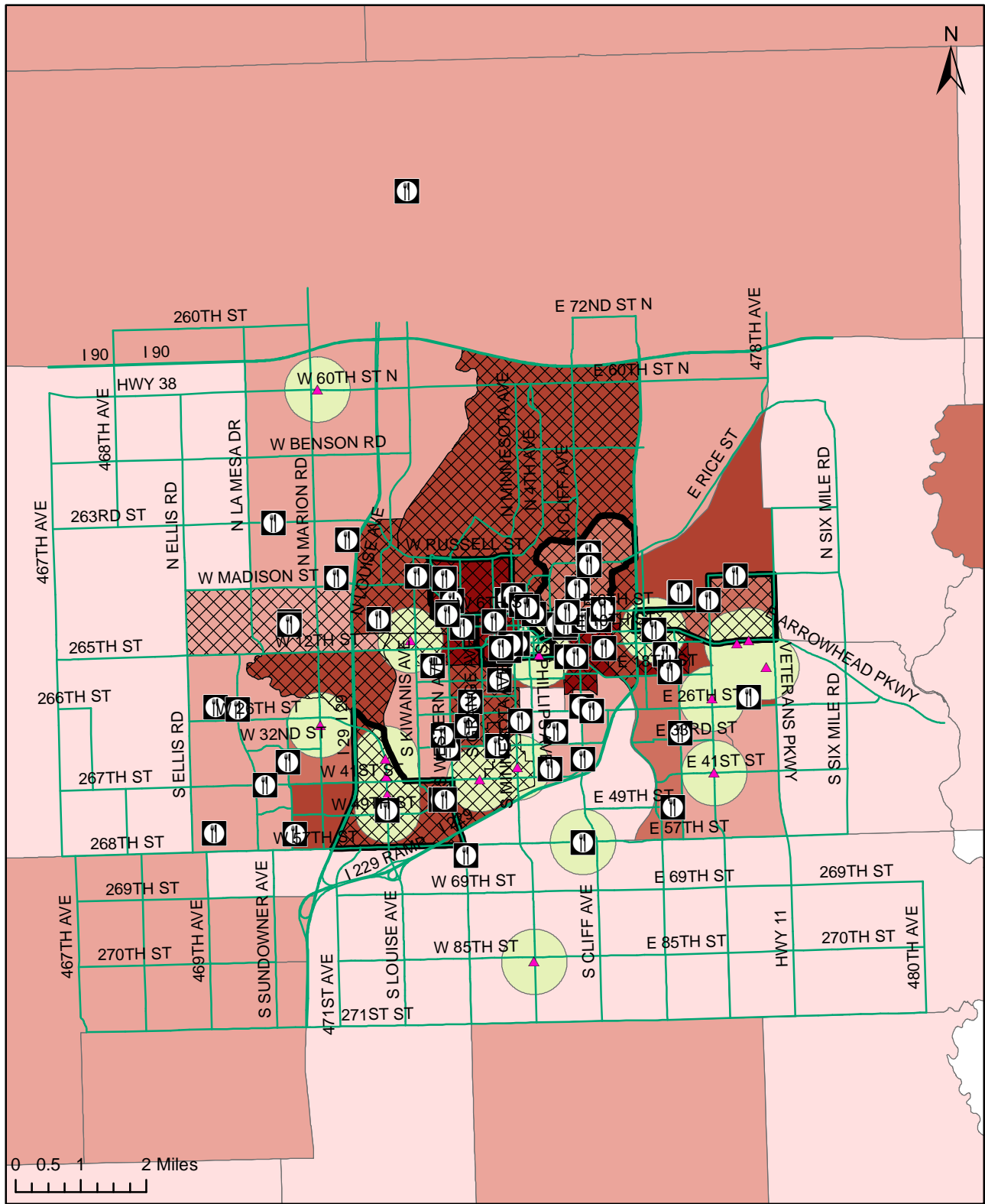
-  Pantries and Giveaways
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Poverty Rate**
-  Less than 5%
 -  5% - 10%
 -  10% - 15%
 -  15% - 20%
 -  Over 20%



Sioux Falls Food Security (2017)








Map 19:
Poverty and Charitable Meals






-  Charitable Meals
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Poverty Rate**
-  Less than 5%
 -  5% - 10%
 -  10% - 15%
 -  15% - 20%
 -  Over 20%

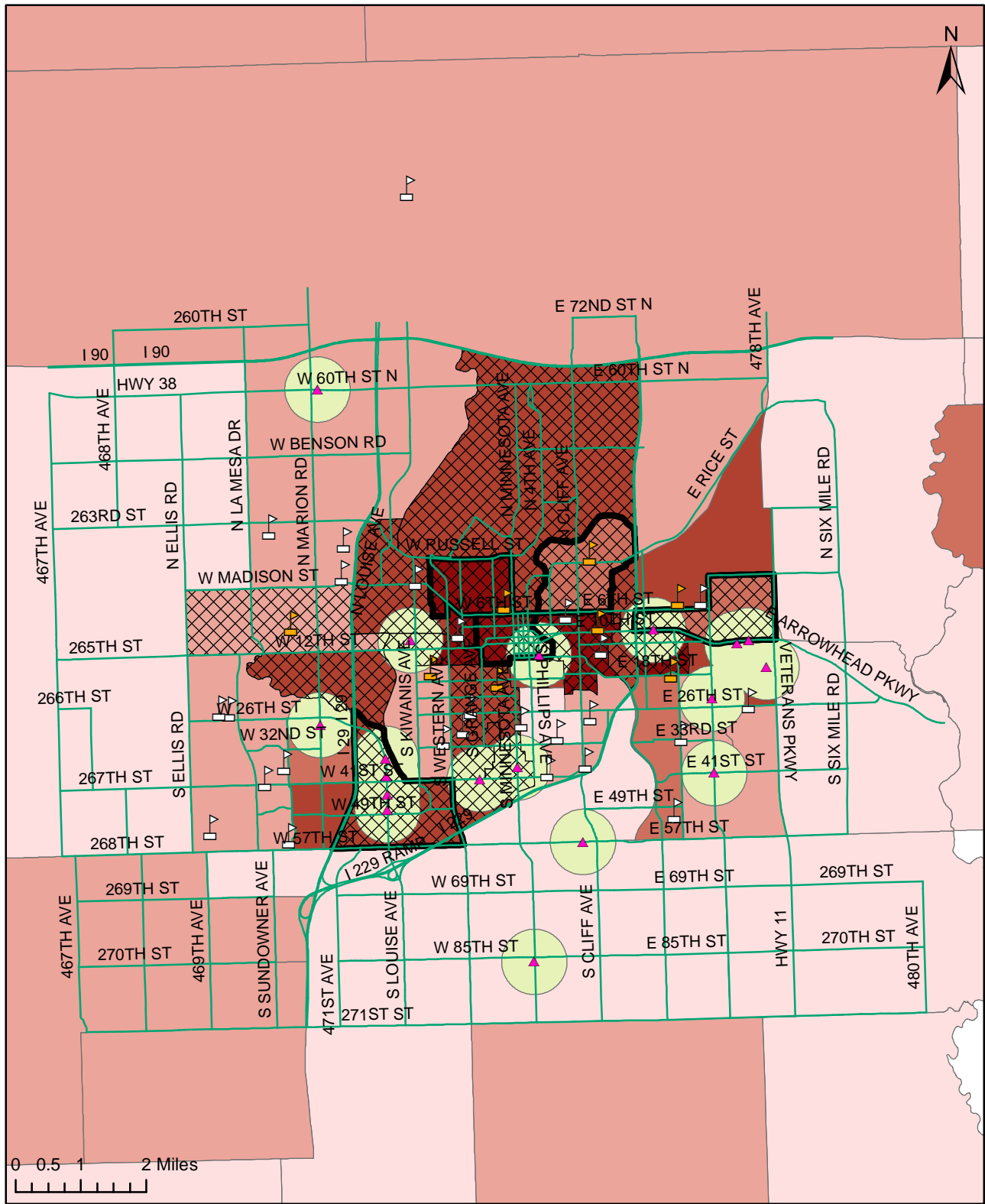


Sioux Falls Food Security (2017)

Map 20:
Poverty and Public Schools












-  Title I Schools
-  Sioux Falls Public Schools
-  Supermarkets
-  Major Streets
-  Food Desert
-  Low Vehicle Access
-  Supermarkets Half Mile Buffer

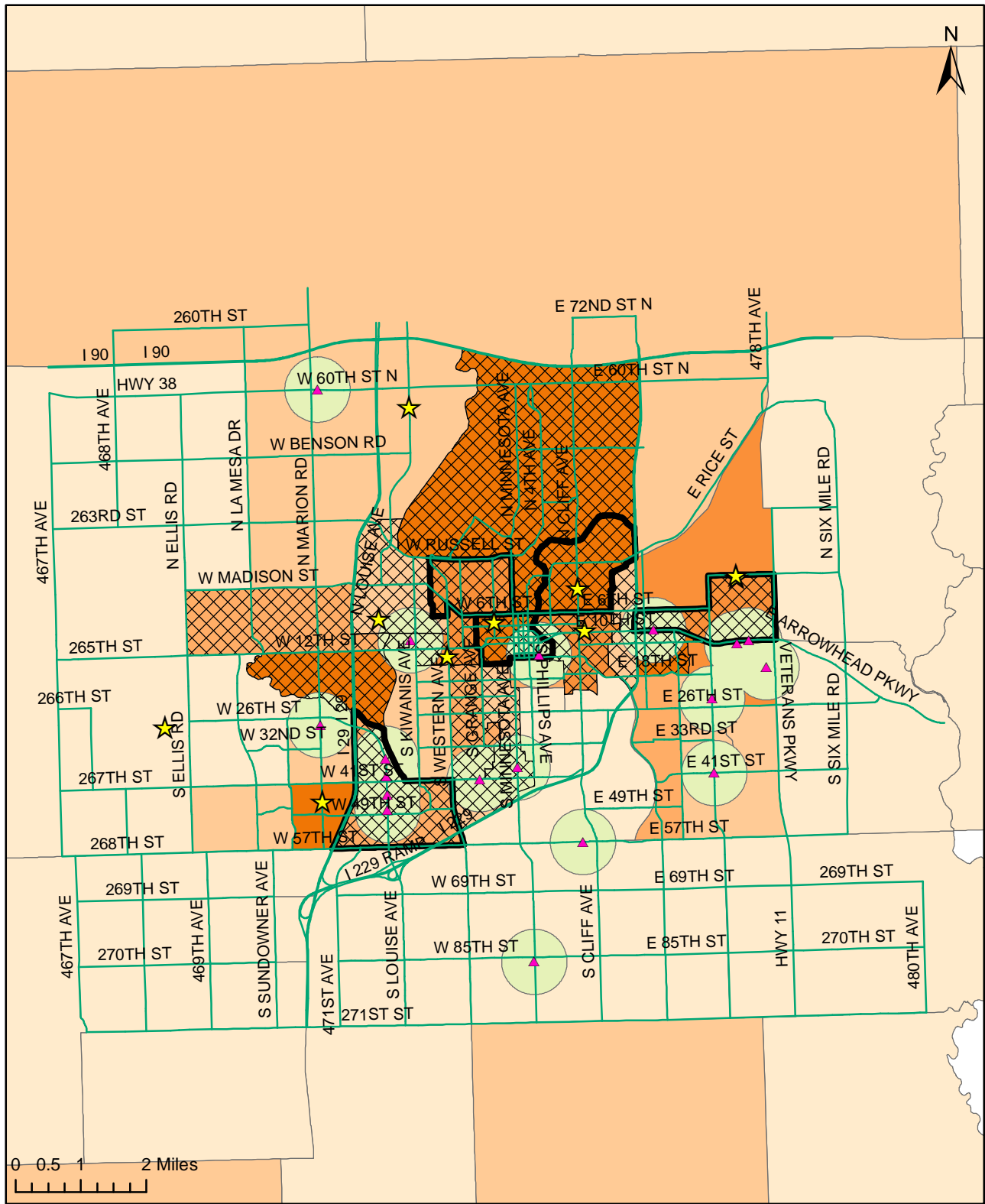
- Poverty Rate**
-  Less than 5%
 -  5% - 10%
 -  10% - 15%
 -  15% - 20%
 -  Over 20%



Sioux Falls Food Security (2017)












**Map 21:
SNAP Recipients
Pantries and Giveaways**

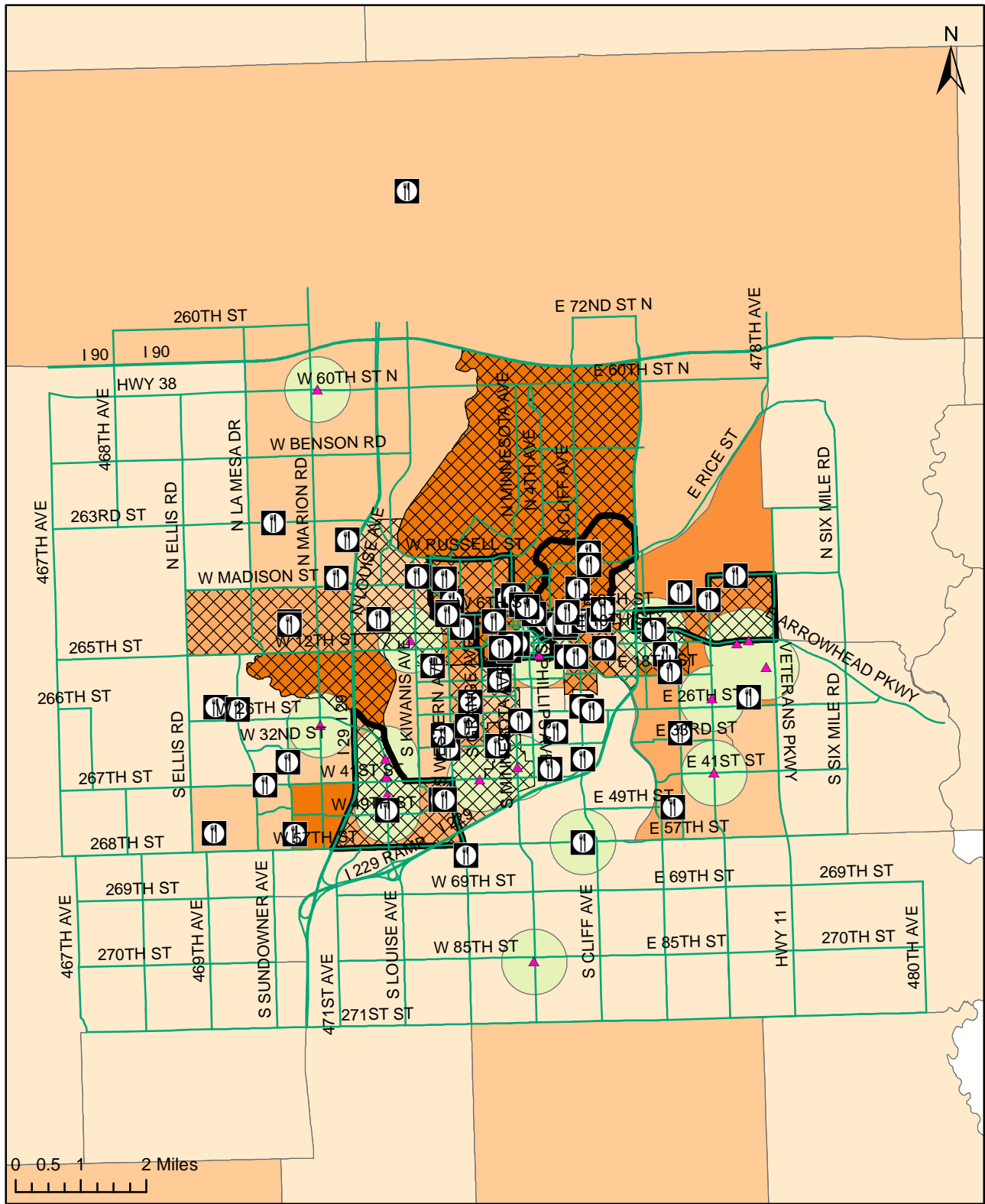
-  Pantries and Giveaways
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Households Receiving SNAP (%)**
-  Less than 5%
 -  5% - 10%
 -  10% - 15%
 -  15% - 20%
 -  Over 20%



Sioux Falls Food Security (2017)

Map 22:
SNAP Recipients
Charitable Meals

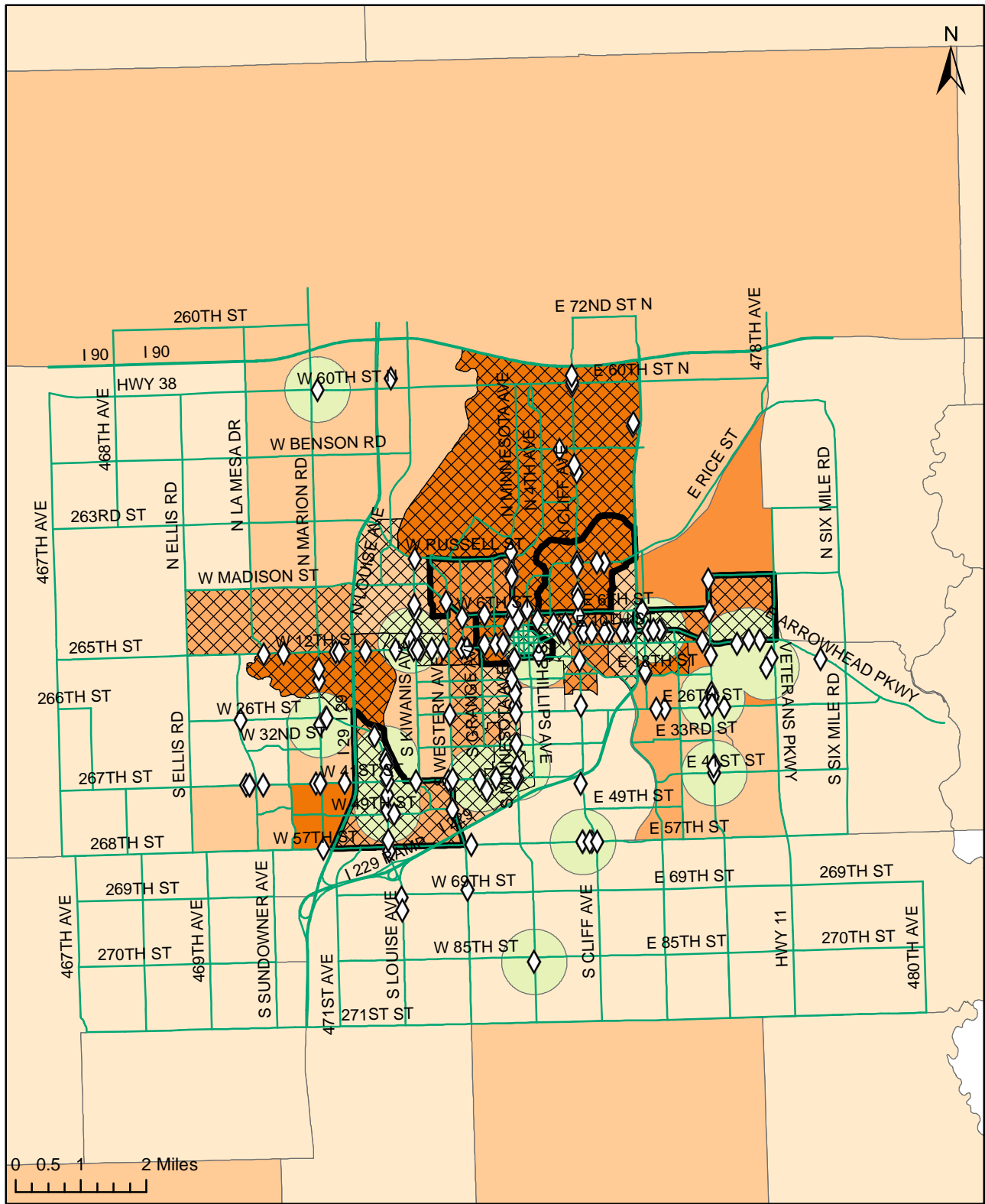
-  Charitable Meals
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Households Receiving SNAP (%)**
-  Less than 5%
 -  5% - 10%
 -  10% - 15%
 -  15% - 20%
 -  Over 20%



Sioux Falls Food Security (2017)

**Map 23:
SNAP Recipients
and SNAP Retailers**

- ◇ SNAP Retailers
 - ▲ Supermarkets
 - Major Streets
 - ▨ Food Desert
 - ▭ Low Vehicle Access
 - ◻ Supermarkets Half Mile Buffer
- Households Receiving SNAP (%)**
- ◻ Less than 5%
 - ◻ 5% - 10%
 - ◻ 10% - 15%
 - ◻ 15% - 20%
 - ◻ Over 20%



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**Map 24:
SNAP Recipients
Retail Type**

- Convenience, Drug, and Dollar Stores
- Small Grocery Stores
- ▲ Supermarkets

Major Streets

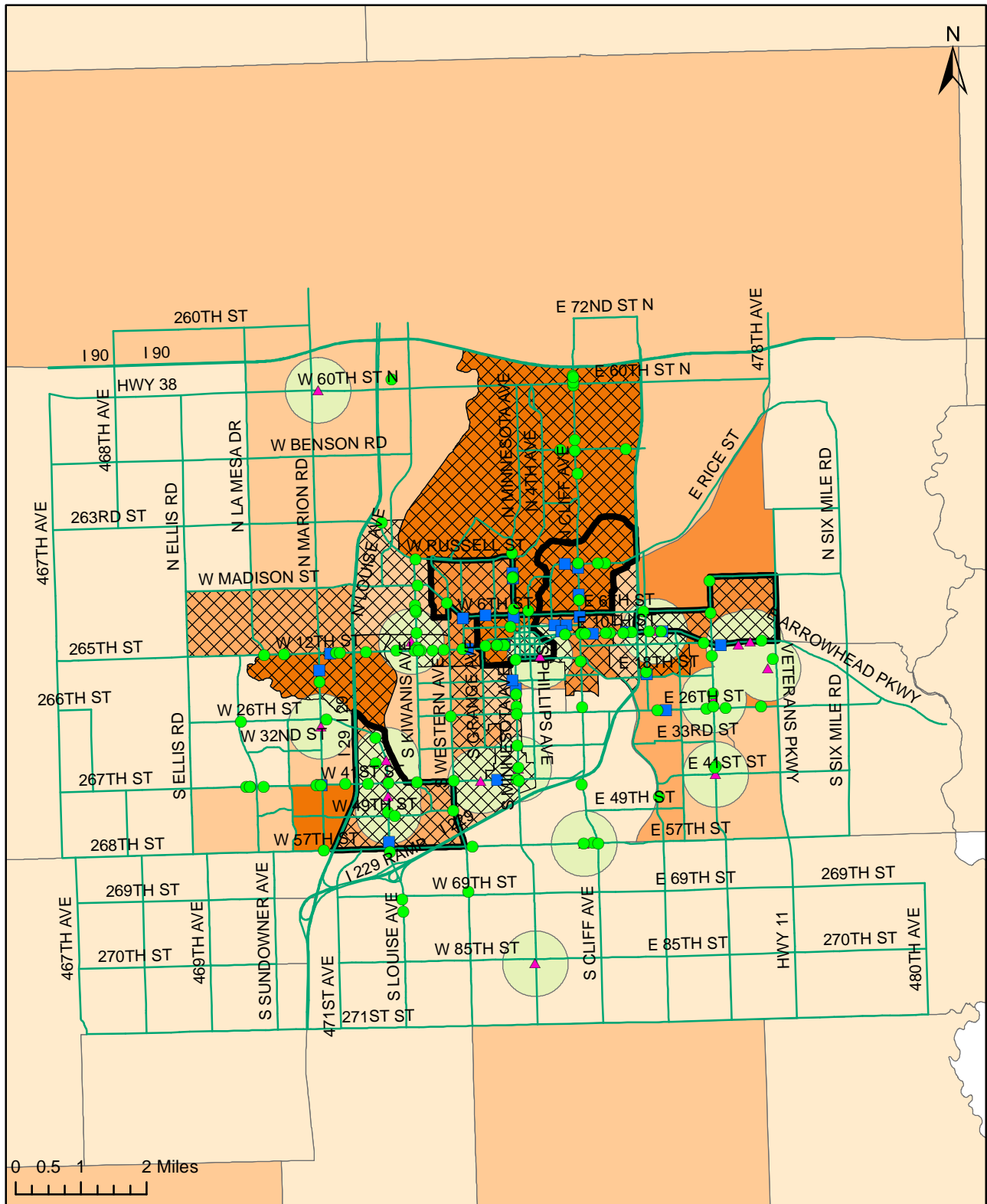
Food Desert

Low Vehicle Access

Supermarkets Half Mile Buffer





Households Receiving SNAP (%)

- Less than 5%
- 5% - 10%
- 10% - 15%
- 15% - 20%
- Over 20%








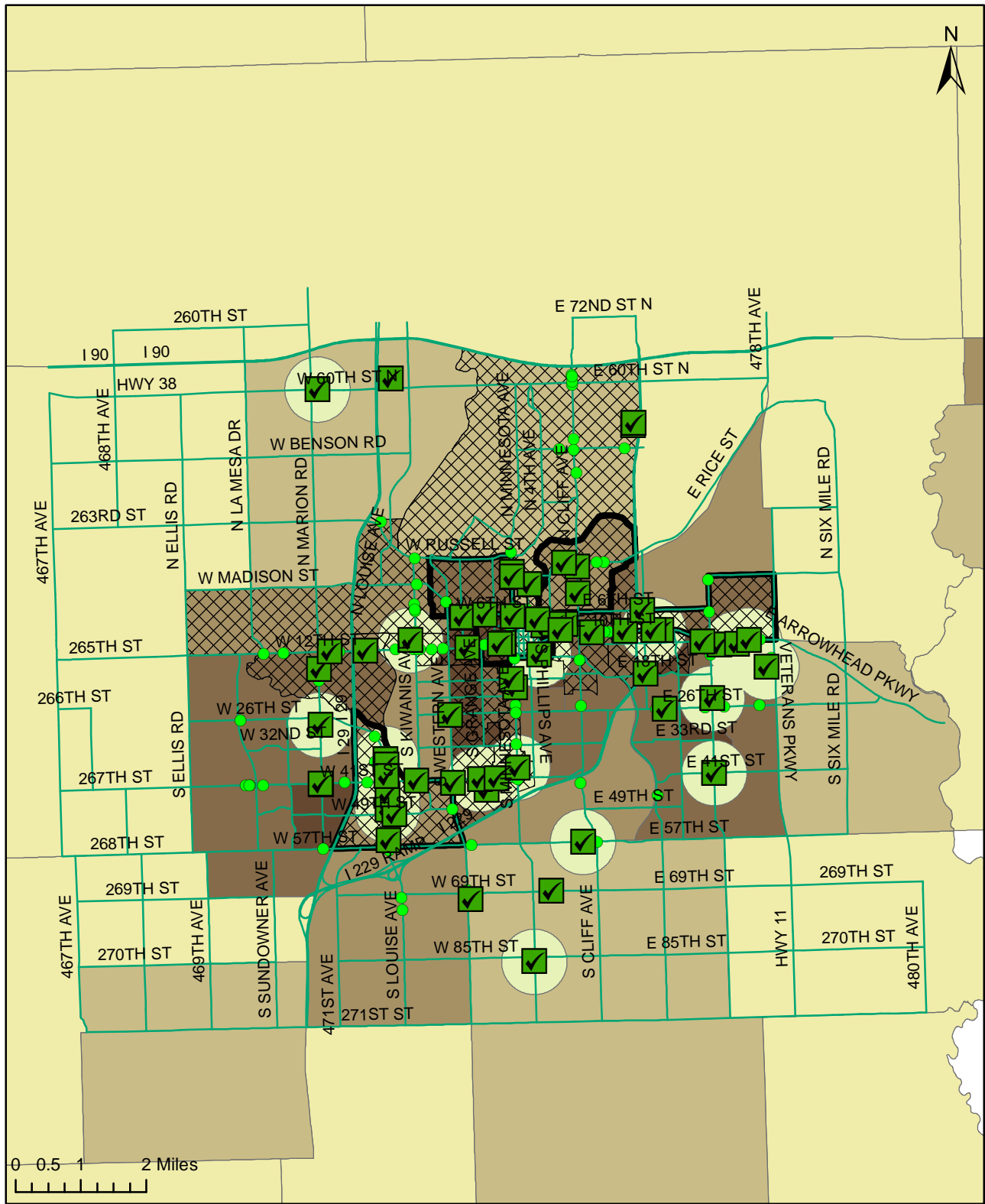
Sioux Falls Food Security (2017)

Map 25:
Food Deserts and Food Swamps
Fresh Fruits and Vegetables

-  Fresh Fruits and Vegetables (Retail)
-  Convenience, Drug, and Dollar Stores
-  Supermarkets
-  Major Streets
-  Food Desert
-  Low Vehicle Access
-  Supermarkets Half Mile Buffer











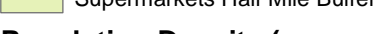
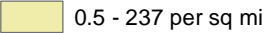
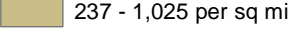
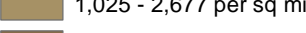
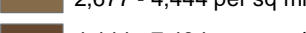

Population Density (per sq mi)

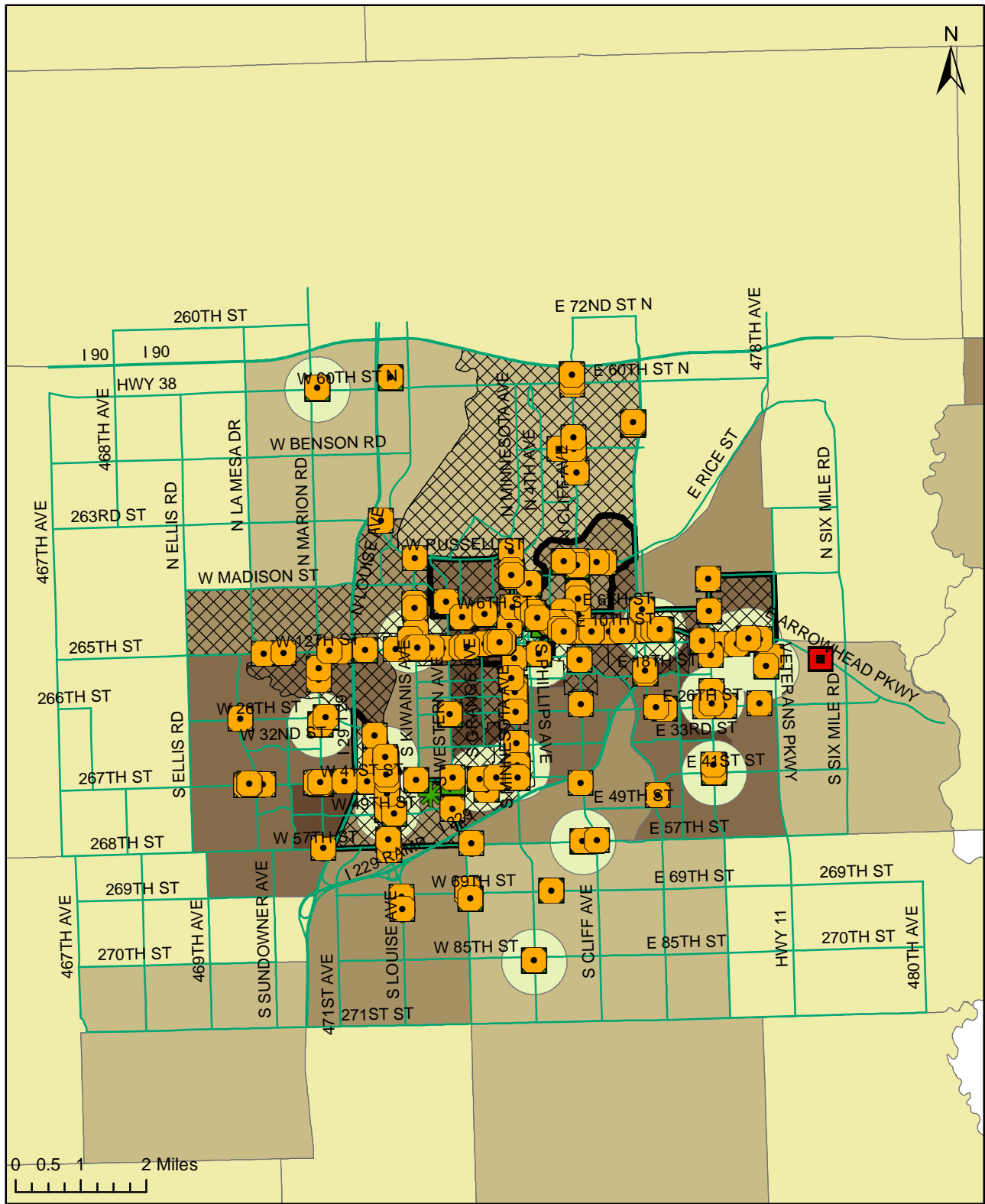
-  0.5 - 237 per sq mi
-  237 - 1,025 per sq mi
-  1,025 - 2,677 per sq mi
-  2,677 - 4,444 per sq mi
-  4,444 - 7,434 per sq mi



Sioux Falls Food Security (2017)












Map 25-A:
Retail Assets and Food Type
All Types

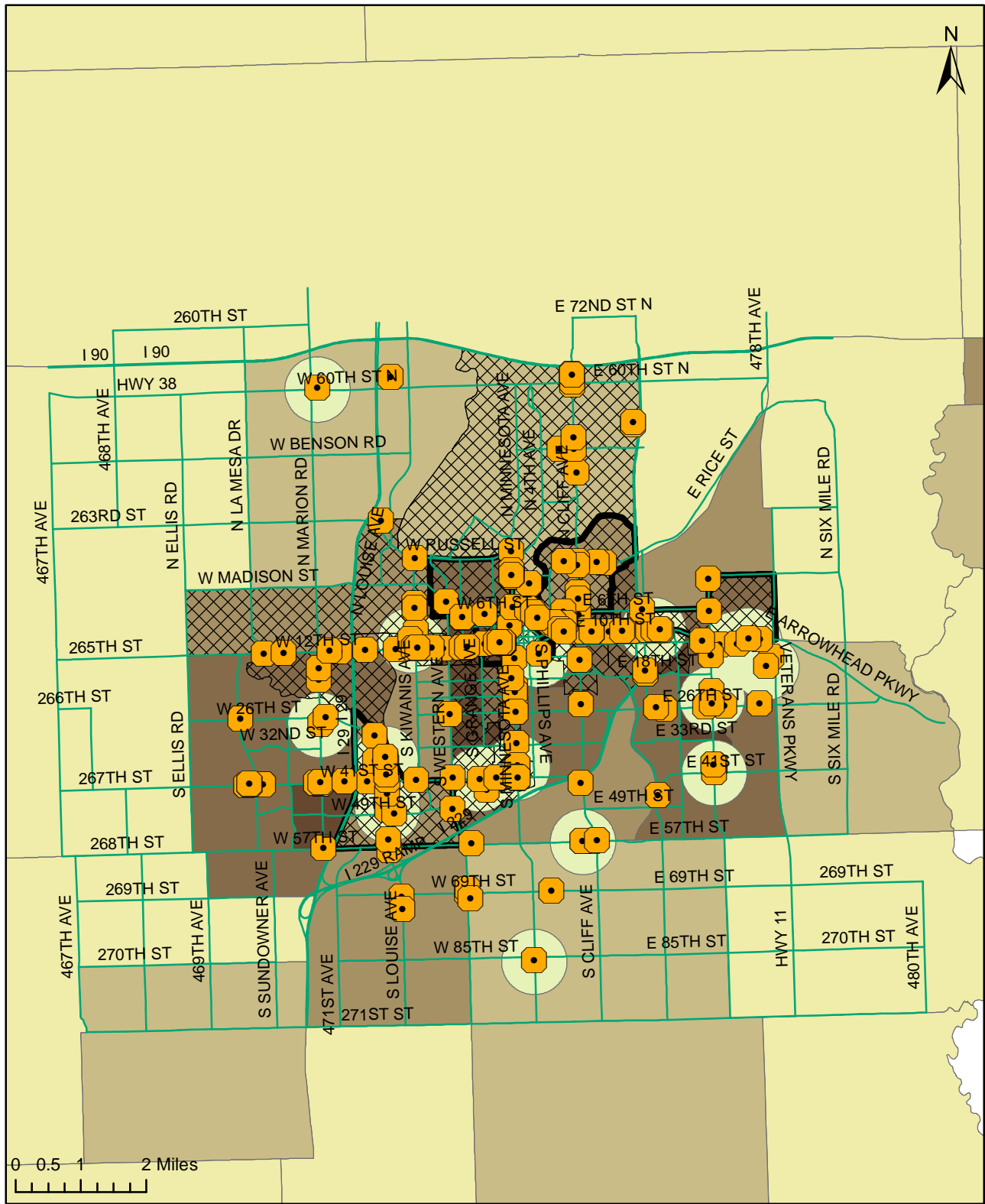
-  Breads and Grains (Retail)
 -  Fresh Fruits and Vegetables (Retail)
 -  Canned Fruits and Vegetables (Retail)
 -  Meat (Retail)
 -  Dairy (Retail)
 -  Fresh Snacks (Retail)
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
-  0.5 - 237 per sq mi
 -  237 - 1,025 per sq mi
 -  1,025 - 2,677 per sq mi
 -  2,677 - 4,444 per sq mi
 -  4,444 - 7,434 per sq mi



Sioux Falls Food Security (2017)








Map 25-B:
Retail Assets and Food Type
Breads and Grains

-  Breads and Grains (Retail)
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
-  0.5 - 237 per sq mi
 -  237 - 1,025 per sq mi
 -  1,025 - 2,677 per sq mi
 -  2,677 - 4,444 per sq mi
 -  4,444 - 7,434 per sq mi








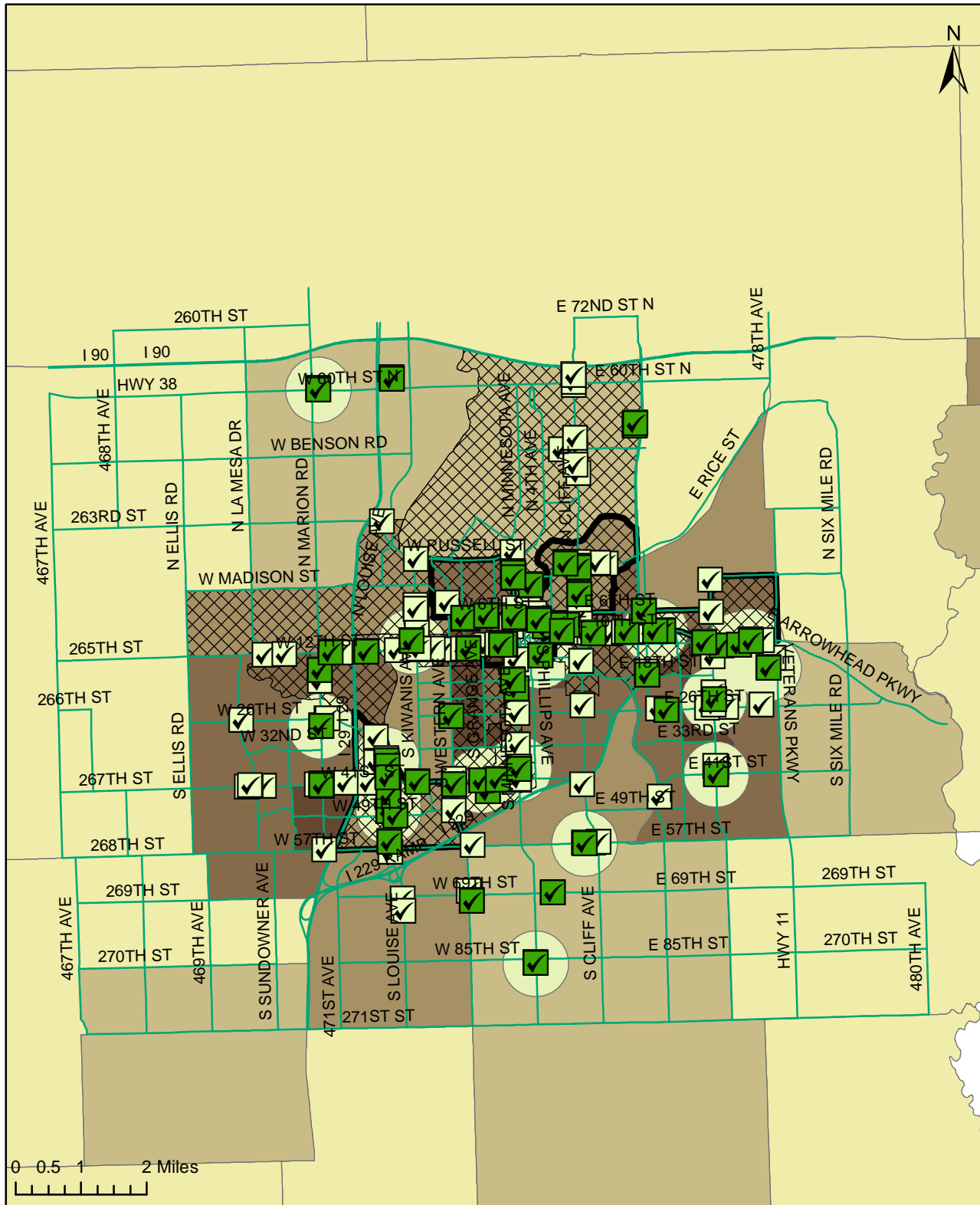
Sioux Falls Food Security (2017)

**Map 25-C:
Retail Assets and Food Type
Fruits and Vegetables**

-  Fresh Fruits and Vegetables (Retail)
-  Canned Fruits and Vegetables (Retail)
-  Supermarkets
-  Major Streets
-  Food Desert
-  Low Vehicle Access
-  Supermarkets Half Mile Buffer












Population Density (per sq mi)

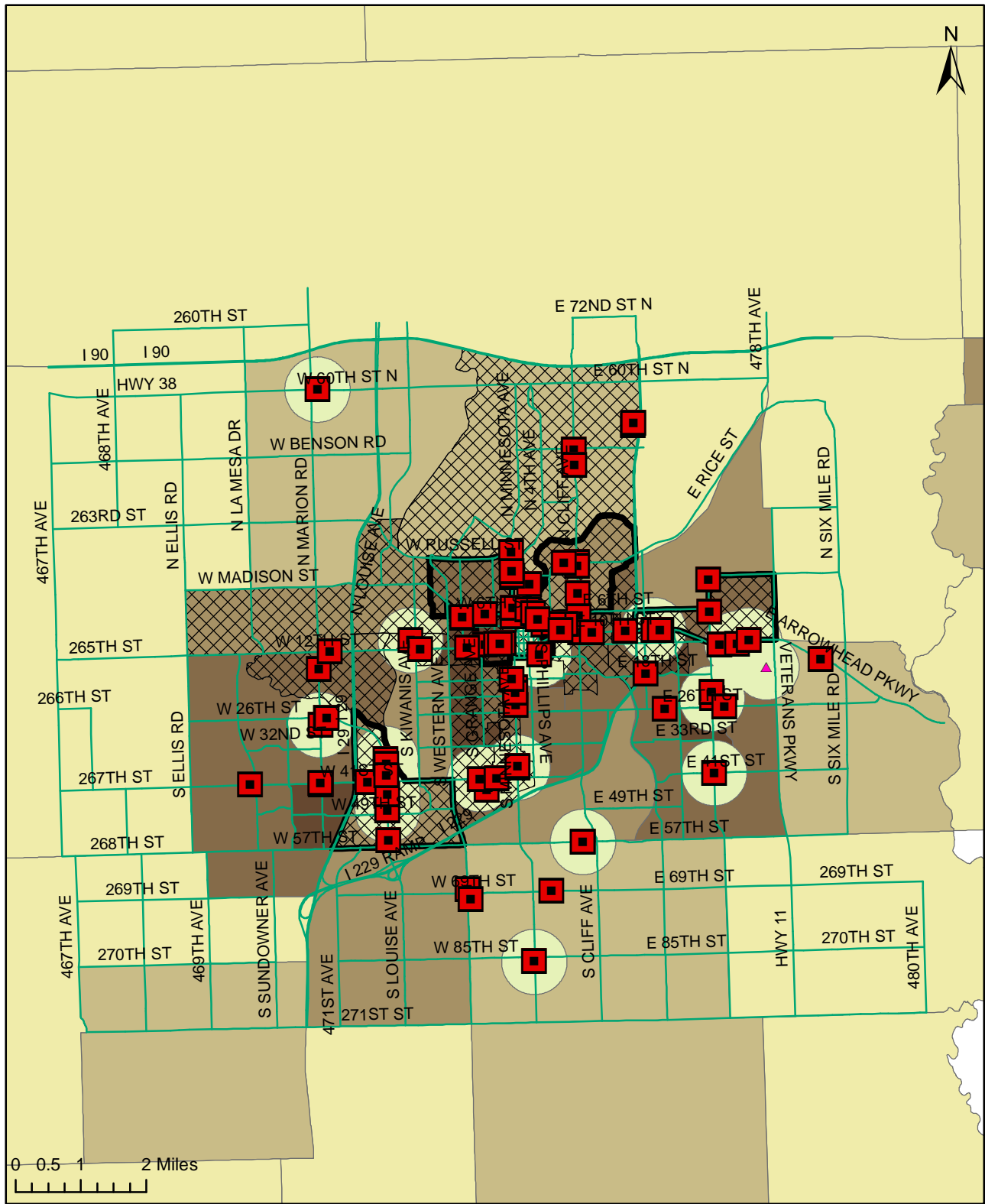
-  0.5 - 237 per sq mi
-  237 - 1,025 per sq mi
-  1,025 - 2,677 per sq mi
-  2,677 - 4,444 per sq mi
-  4,444 - 7,434 per sq mi



Sioux Falls Food Security (2017)

Map 25-D:
Retail Assets and Food Type
Meat

-  Meat (Retail)
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
-  0.5 - 237 per sq mi
 -  237 - 1,025 per sq mi
 -  1,025 - 2,677 per sq mi
 -  2,677 - 4,444 per sq mi
 -  4,444 - 7,434 per sq mi



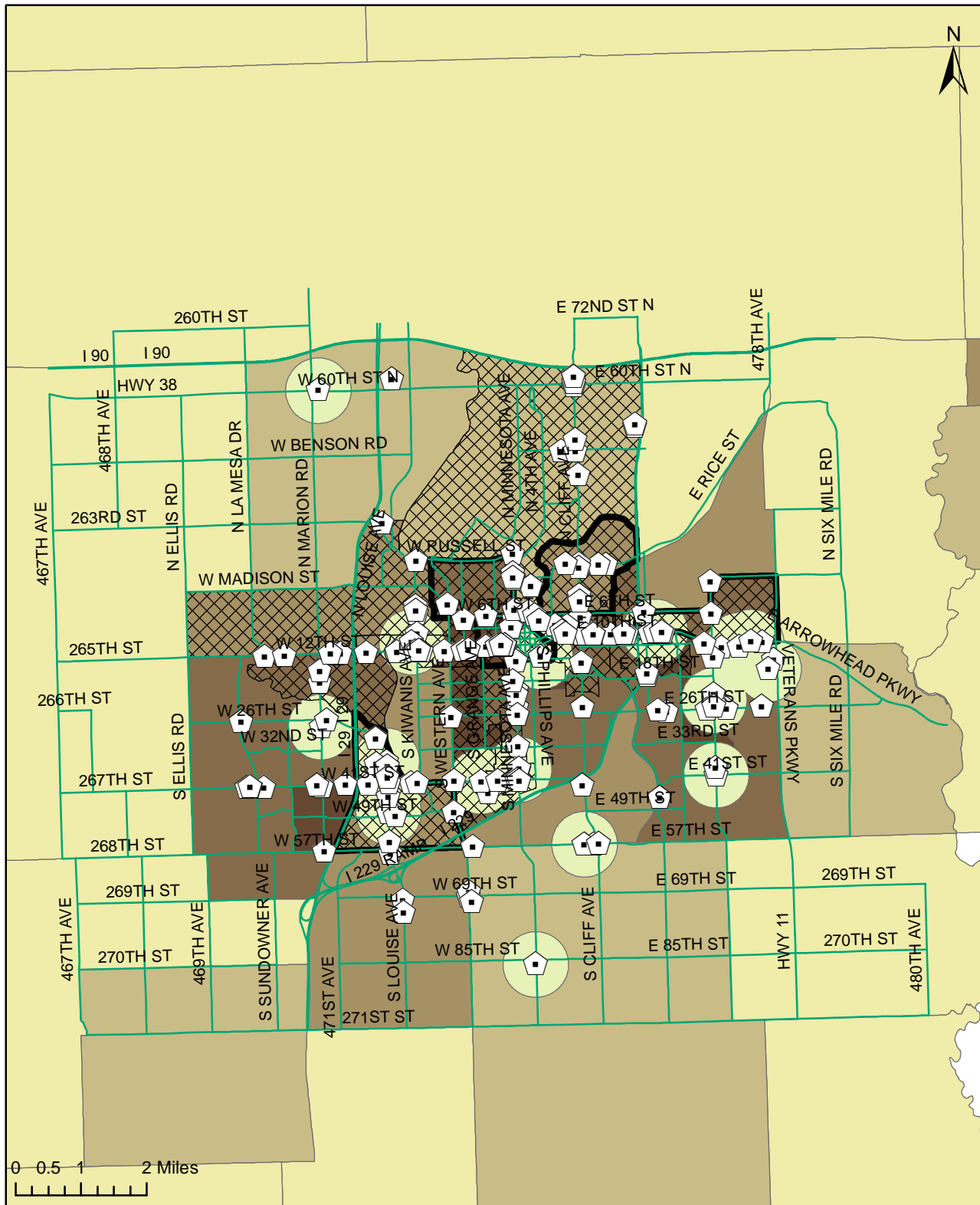
Sioux Falls Food Security (2017)

Map 25-E: Retail Assets and Food Type Dairy

- 🏠 Dairy (Retail)
- ▲ Supermarkets
- Major Streets
- 🏡 Food Desert
- 🚧 Low Vehicle Access
- 🟡 Supermarkets Half Mile Buffer












Population Density (per sq mi)

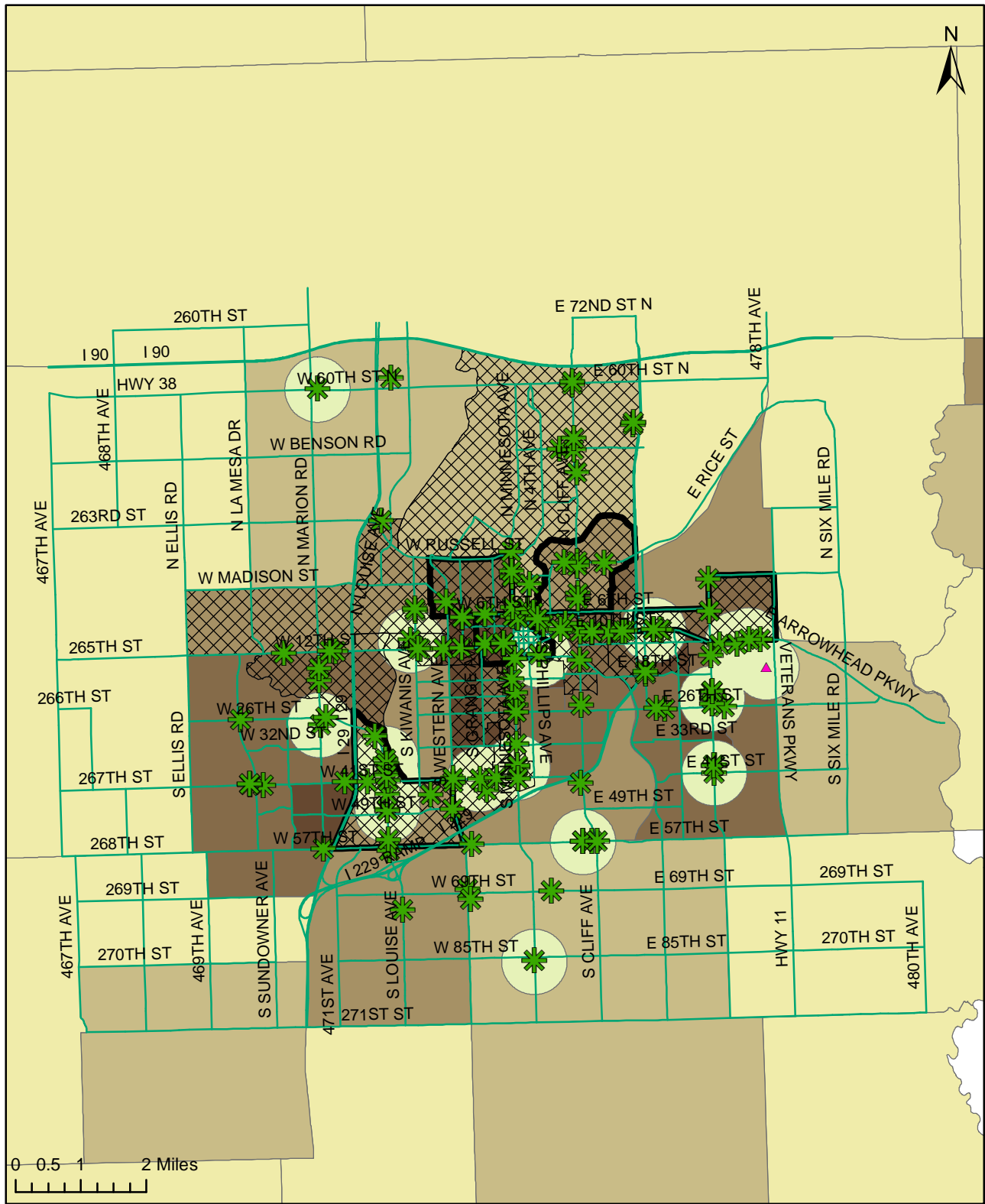
- 0.5 - 237 per sq mi
- 237 - 1,025 per sq mi
- 1,025 - 2,677 per sq mi
- 2,677 - 4,444 per sq mi
- 4,444 - 7,434 per sq mi



Sioux Falls Food Security (2017)

Map 25-F:
Retail Assets and Food Type
Fresh Snacks

-  Fresh Snacks (Retail)
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
-  0.5 - 237 per sq mi
 -  237 - 1,025 per sq mi
 -  1,025 - 2,677 per sq mi
 -  2,677 - 4,444 per sq mi
 -  4,444 - 7,434 per sq mi

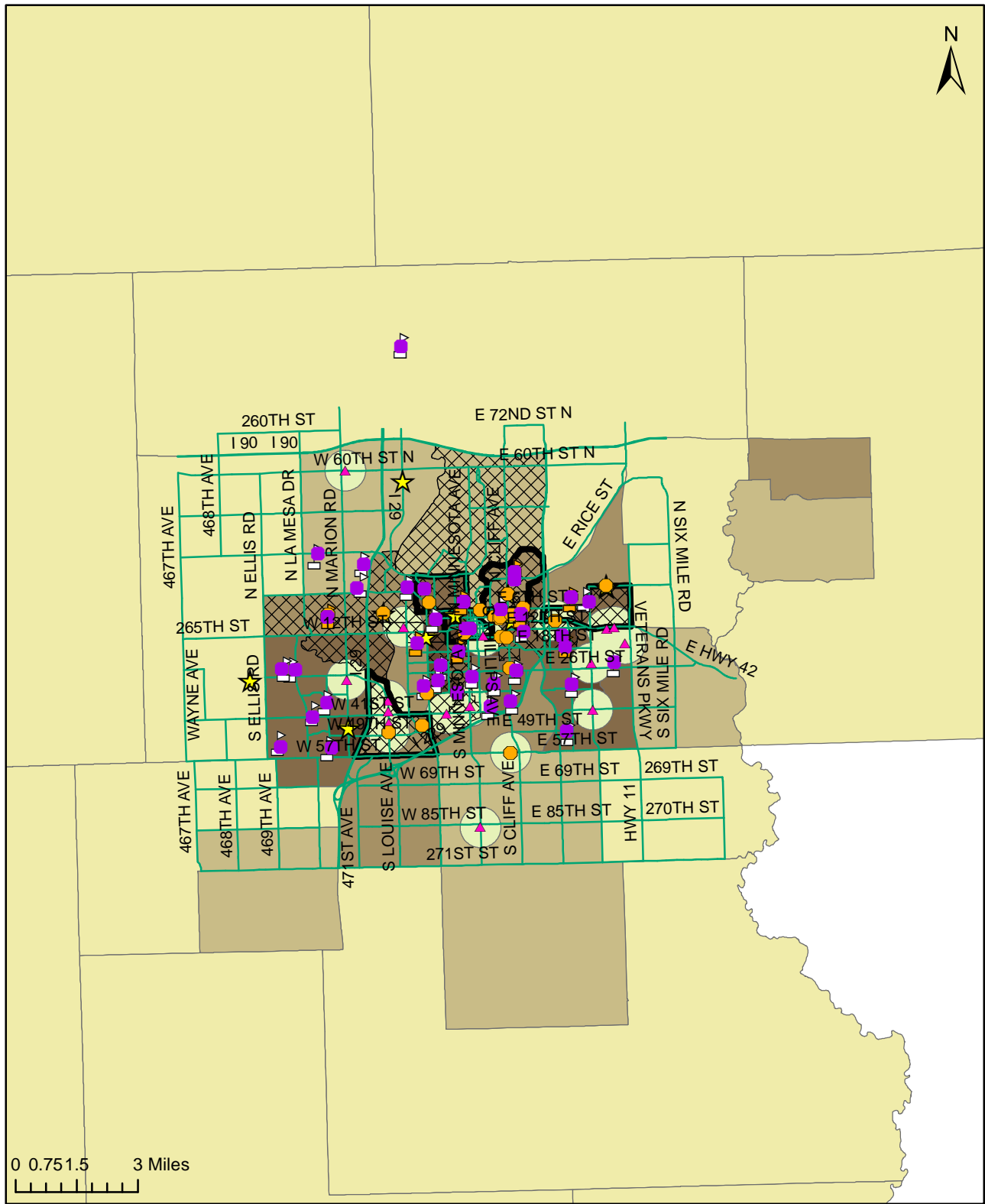


Sioux Falls Food Security (2017)



**Map 26:
Charitable Assets and Nutrition**

- Backpack Program
 - Charitable Meals (Bread and Grains)
 - Charitable Meals (Fruits and Vegetables)
 - Charitable Meals (Meat)
 - Charitable Meals (Dairy)
 - Title I Schools
 - Sioux Falls Public Schools
 - Pantries and Giveaways
 - Supermarkets
 - Major Streets
 - Food Desert
 - Low Vehicle Access
 - Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
- 0.5 - 237 per sq mi
 - 237 - 1,025 per sq mi
 - 1,025 - 2,677 per sq mi
 - 2,677 - 4,444 per sq mi
 - 4,444 - 7,434 per sq mi



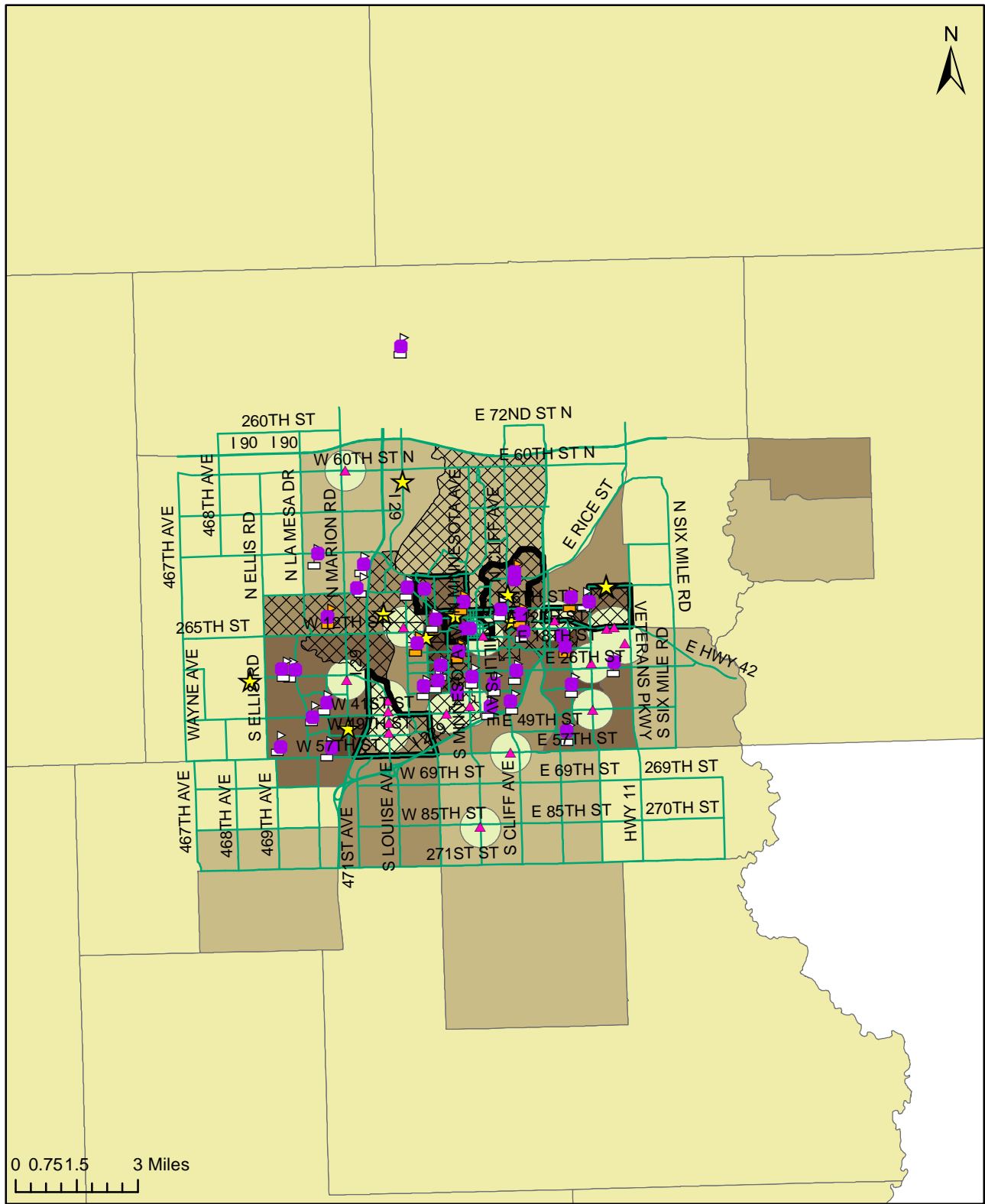
Sioux Falls Food Security (2017)

Map 26-A: Charitable Assets and Nutrition Backpack Programs

- Backpack Program
- 🚩 Title I Schools
- 🏫 Sioux Falls Public Schools
- ★ Pantries and Giveaways
- ▲ Supermarkets
- Major Streets
- ▩ Food Desert
- ▭ Low Vehicle Access
- Supermarkets Half Mile Buffer

Population Density (per sq mi)

- 0.5 - 237 per sq mi
- 237 - 1,025 per sq mi
- 1,025 - 2,677 per sq mi
- 2,677 - 4,444 per sq mi
- 4,444 - 7,434 per sq mi



0 0.75 1.5 3 Miles

Sioux Falls Food Security (2017)



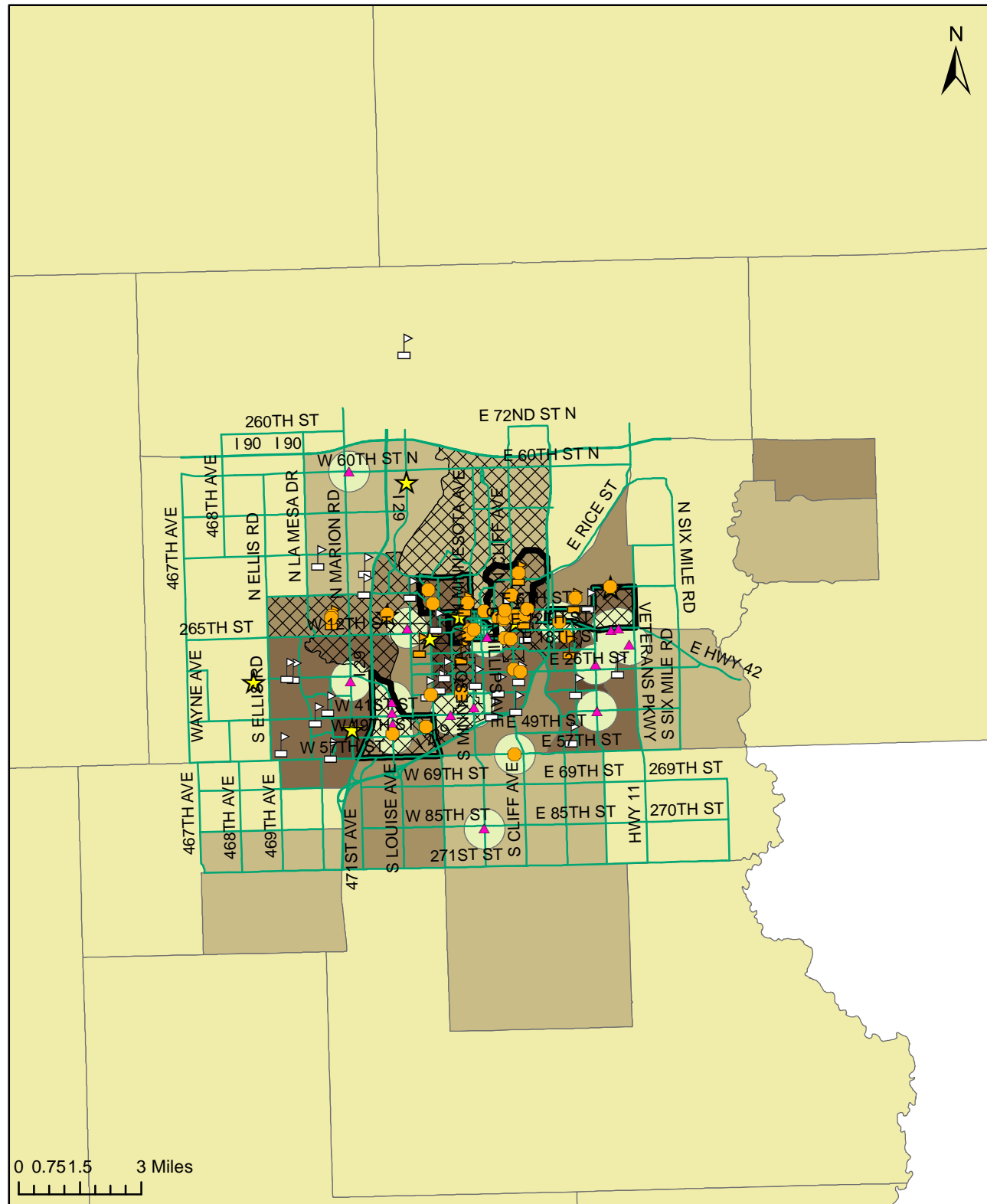
Map 26-B:
Charitable Assets and Nutrition
Bread and Grains

- Charitable Meals (Bread and Grains)
- Title I Schools
- Sioux Falls Public Schools
- Pantries and Giveaways
- Supermarkets

- Major Streets
- Food Desert
- Low Vehicle Access
- Supermarkets Half Mile Buffer

Population Density (per sq mi)

- 0.5 - 237 per sq mi
- 237 - 1,025 per sq mi
- 1,025 - 2,677 per sq mi
- 2,677 - 4,444 per sq mi
- 4,444 - 7,434 per sq mi

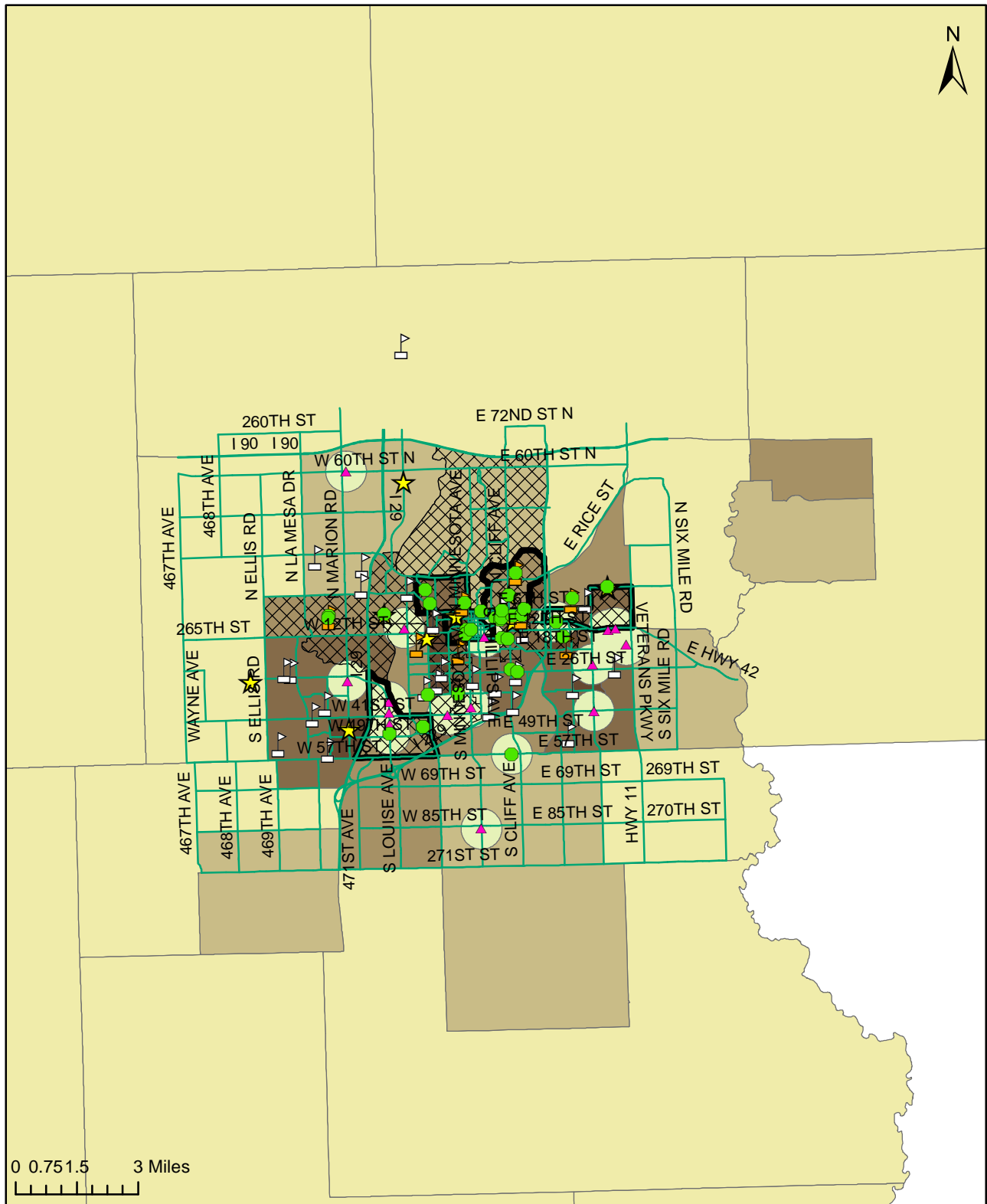


Sioux Falls Food Security (2017)



Map 26-C: Charitable Assets and Nutrition Fruits and Vegetables

- Charitable Meals (Fruits and Vegetables)
 - 🚩 Title I Schools
 - 🏫 Sioux Falls Public Schools
 - ★ Pantries and Giveaways
 - ▲ Supermarkets
 - Major Streets
 - 🌐 Food Desert
 - 🚗 Low Vehicle Access
 - 🟩 Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
- 0.5 - 237 per sq mi
 - 237 - 1,025 per sq mi
 - 1,025 - 2,677 per sq mi
 - 2,677 - 4,444 per sq mi
 - 4,444 - 7,434 per sq mi

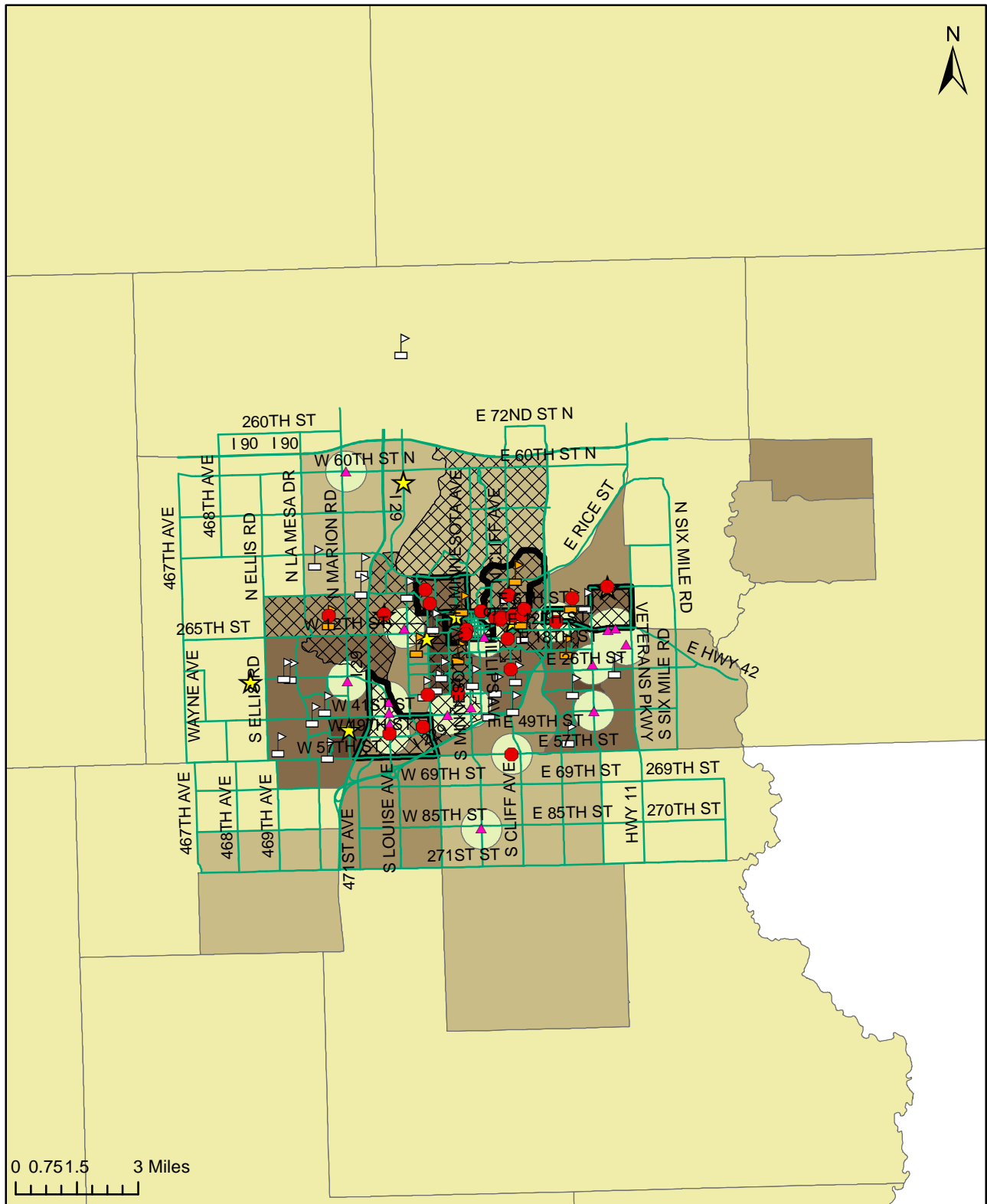


Sioux Falls Food Security (2017)



Map 26-D:
Charitable Assets and Nutrition
Meat















- Charitable Meals (Meat)
 - ▲ Title I Schools
 - Sioux Falls Public Schools
 - ★ Pantries and Giveaways
 - ▲ Supermarkets
 - Major Streets
 - Food Desert
 - Low Vehicle Access
 - Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
- 0.5 - 237 per sq mi
 - 237 - 1,025 per sq mi
 - 1,025 - 2,677 per sq mi
 - 2,677 - 4,444 per sq mi
 - 4,444 - 7,434 per sq mi

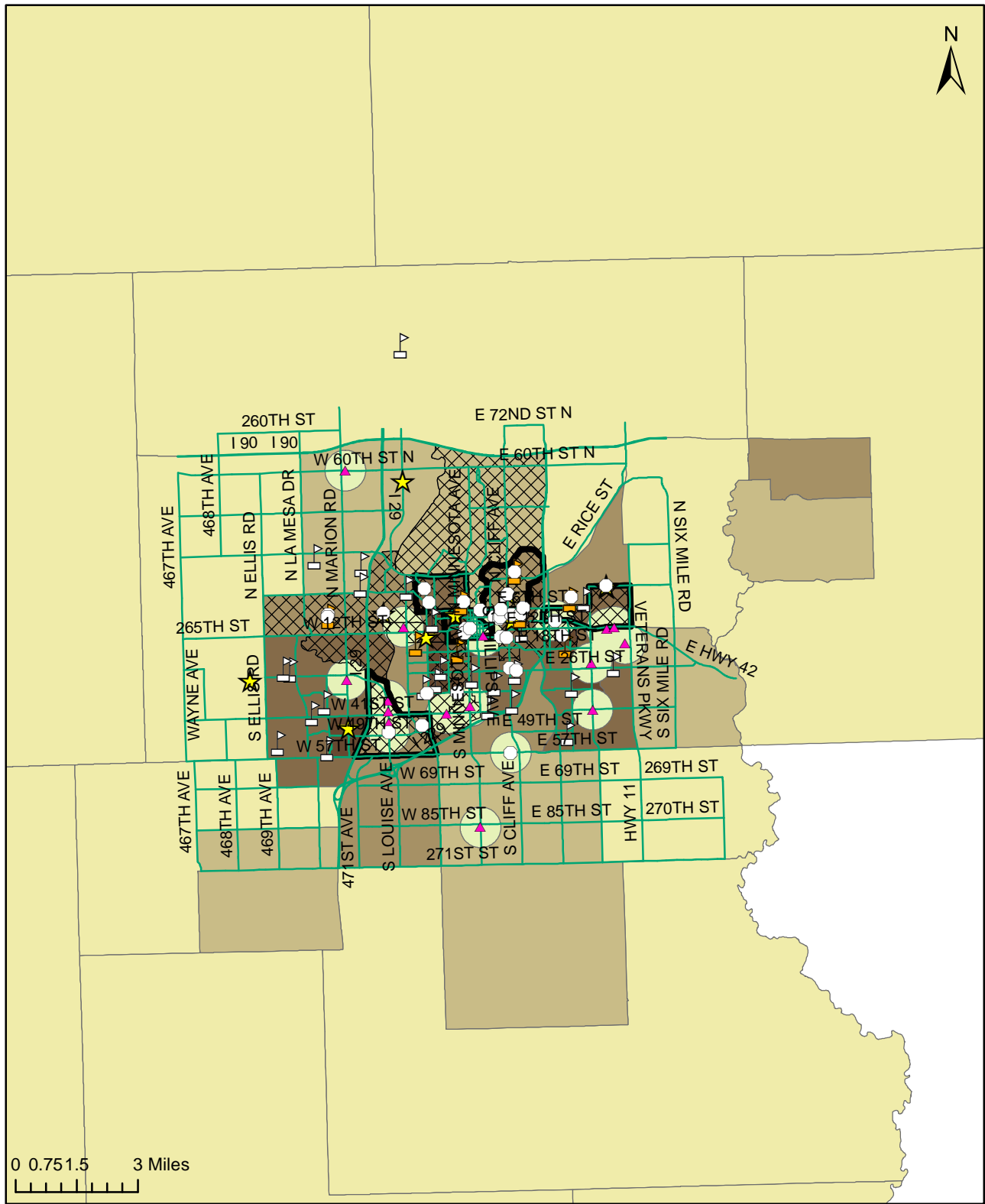


Sioux Falls Food Security (2017)



Map 26-E:
Charitable Assets and Nutrition
Dairy

-  Charitable Meals (Dairy)
 -  Title I Schools
 -  Sioux Falls Public Schools
 -  Pantries and Giveaways
 -  Supermarkets
 -  Major Streets
 -  Food Desert
 -  Low Vehicle Access
 -  Supermarkets Half Mile Buffer
- Population Density (per sq mi)**
-  0.5 - 237 per sq mi
 -  237 - 1,025 per sq mi
 -  1,025 - 2,677 per sq mi
 -  2,677 - 4,444 per sq mi
 -  4,444 - 7,434 per sq mi



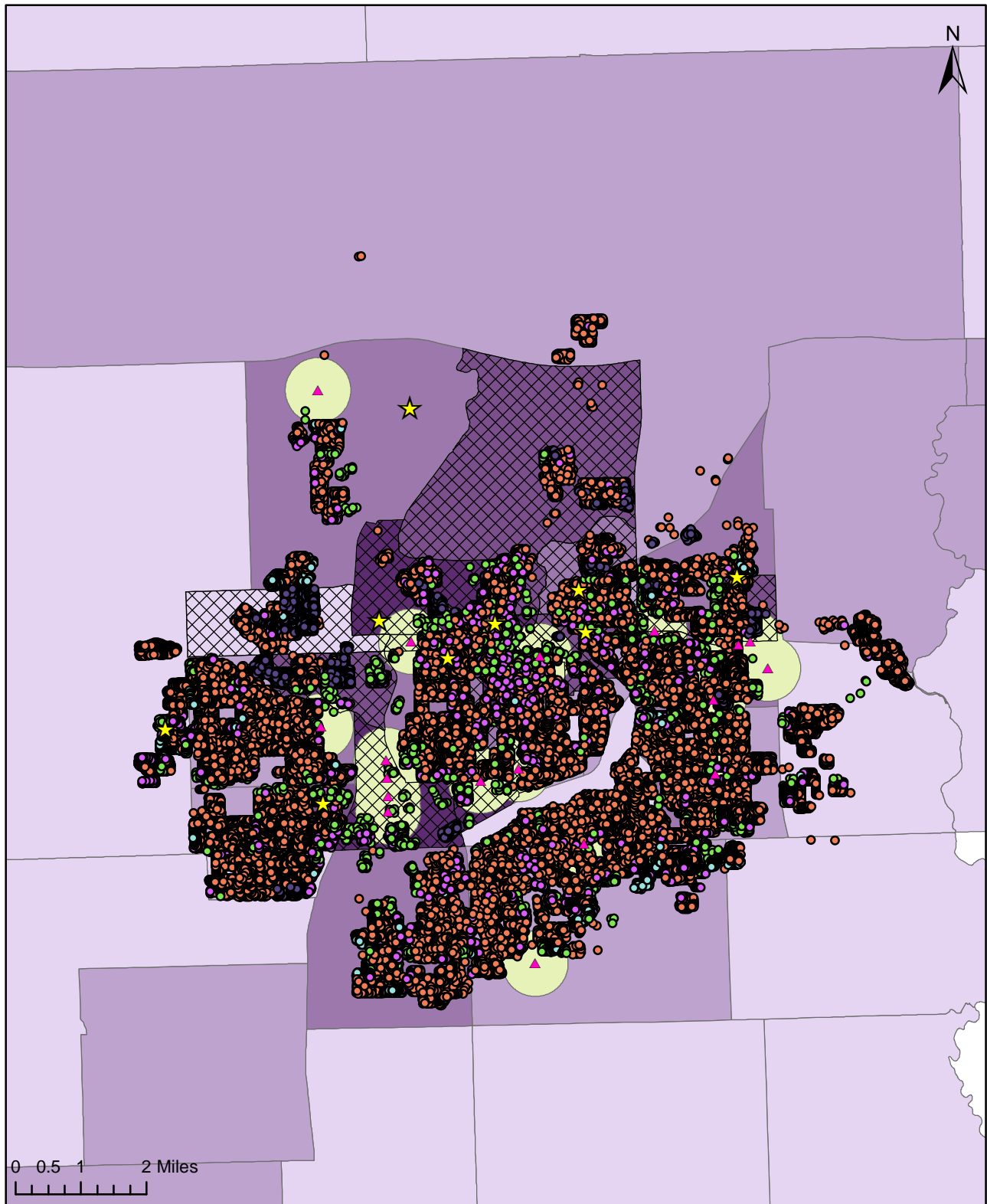
Sioux Falls Food Security (2017)

Detail 1: Residential Type

- ★ Pantries and Giveaways
 - ▲ Supermarkets
 - ▨ Food Desert
 - Supermarkets Half Mile Buffer
- Residential Type**
- Mobile Home Park
 - Multi-Family Dwelling
 - Townhome
 - Two-Family Dwelling
 - Single-Family Dwelling

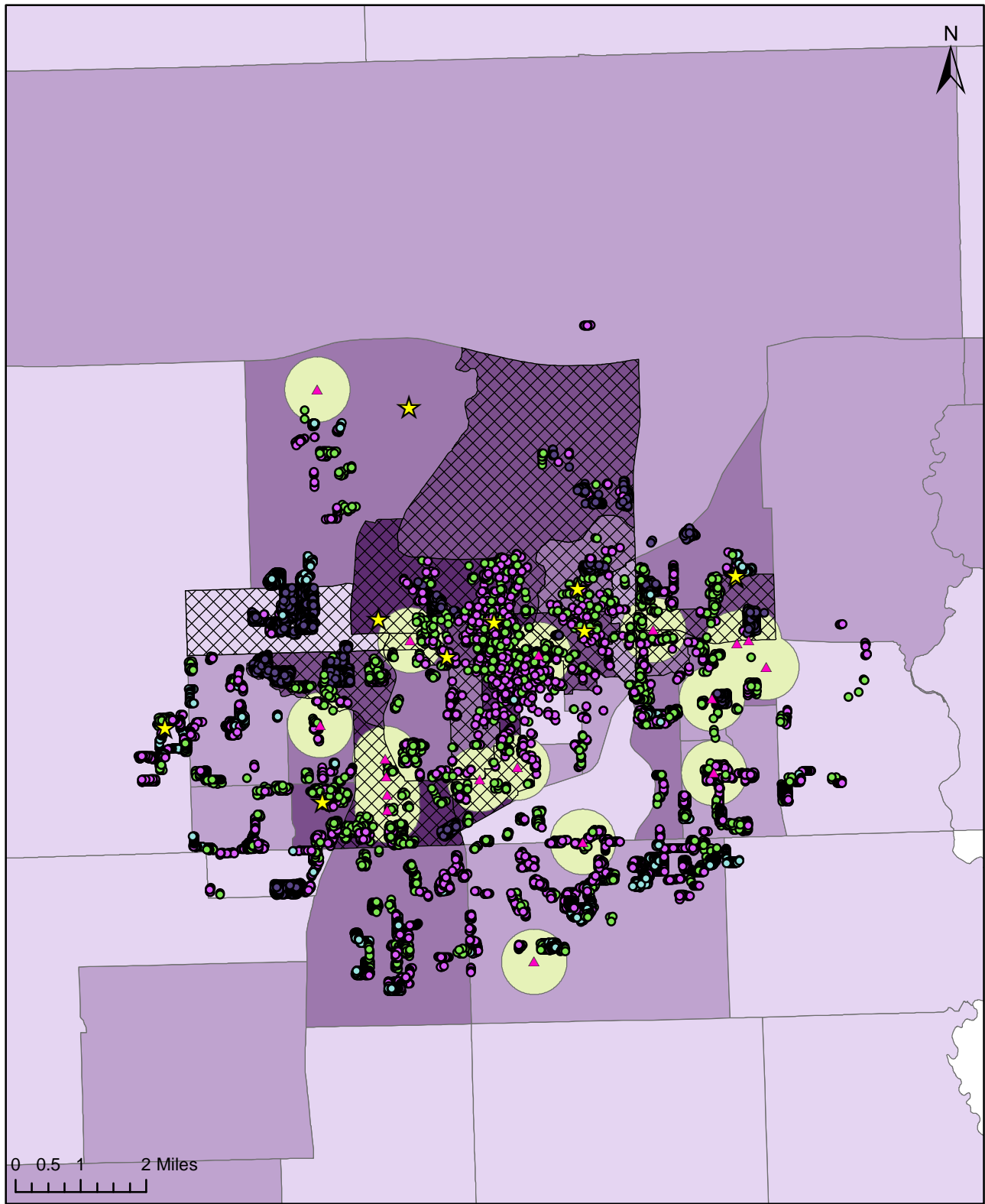
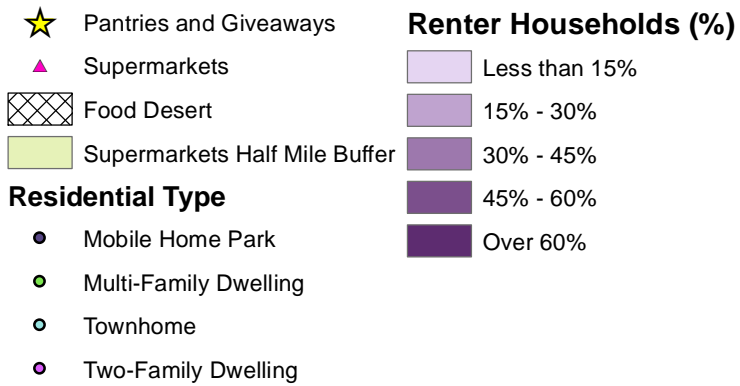
Renter Households (%)

- Less than 15%
- 15% - 30%
- 30% - 45%
- 45% - 60%
- Over 60%



Sioux Falls Food Security (2017)

Detail 2: Residential Type Excluding Single Family Dwellings



Sioux Falls Food Security (2017)

Detail 3: Residential Type with Half and 1 Mile Supermarket Buffers

★	Pantries and Giveaways	Renter Households (%)
▲	Supermarkets	Less than 15%
◻	Supermarkets Half Mile Buffer	15% - 30%
◻	Supermarkets 1 Mile Buffer	30% - 45%
Residential Type		45% - 60%
●	Mobile Home Park	Over 60%
●	Multi-Family Dwelling	
○	Townhome	
○	Two-Family Dwelling	
○	Single-Family Dwelling	
—	Major Streets	
▨	Food Desert	

