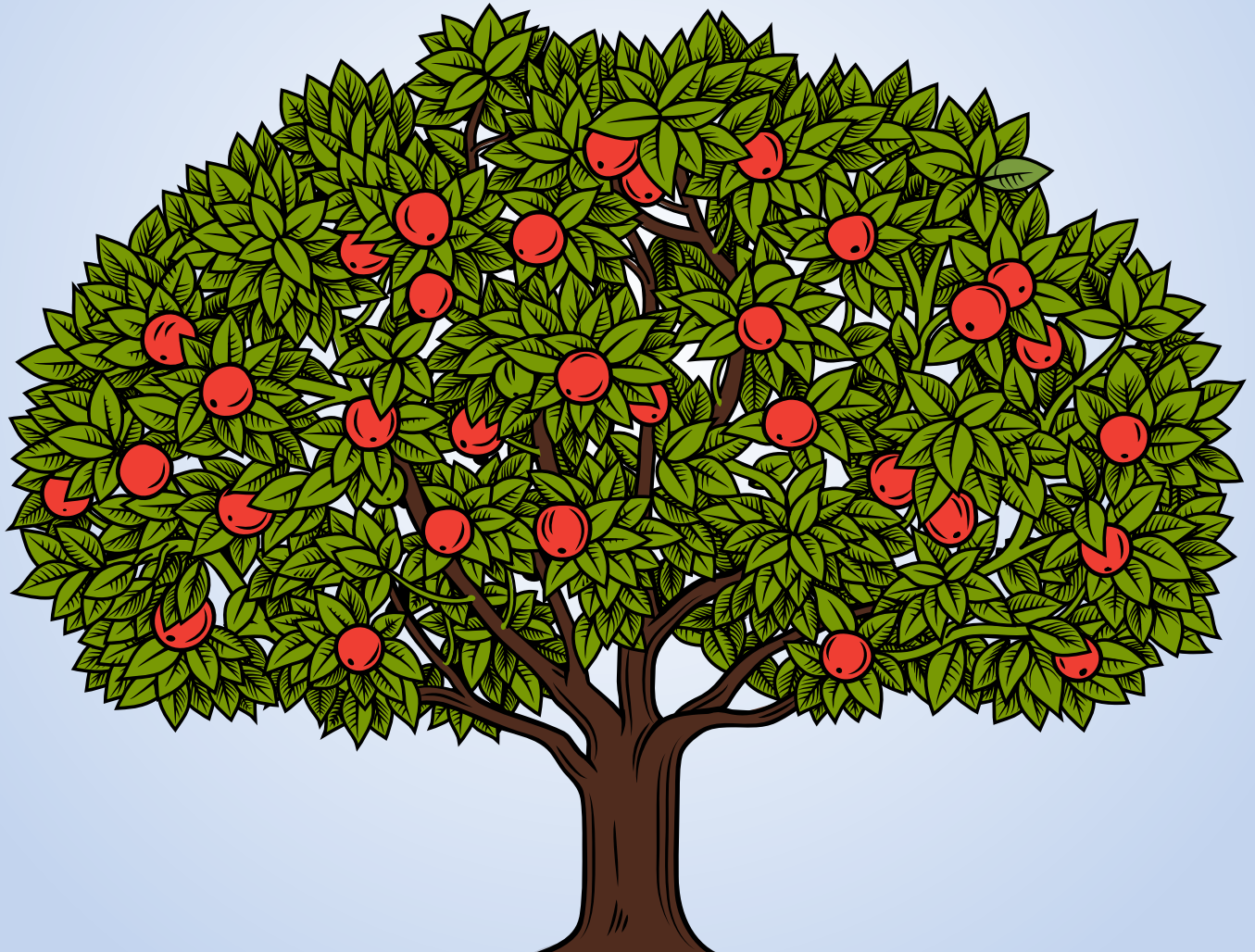
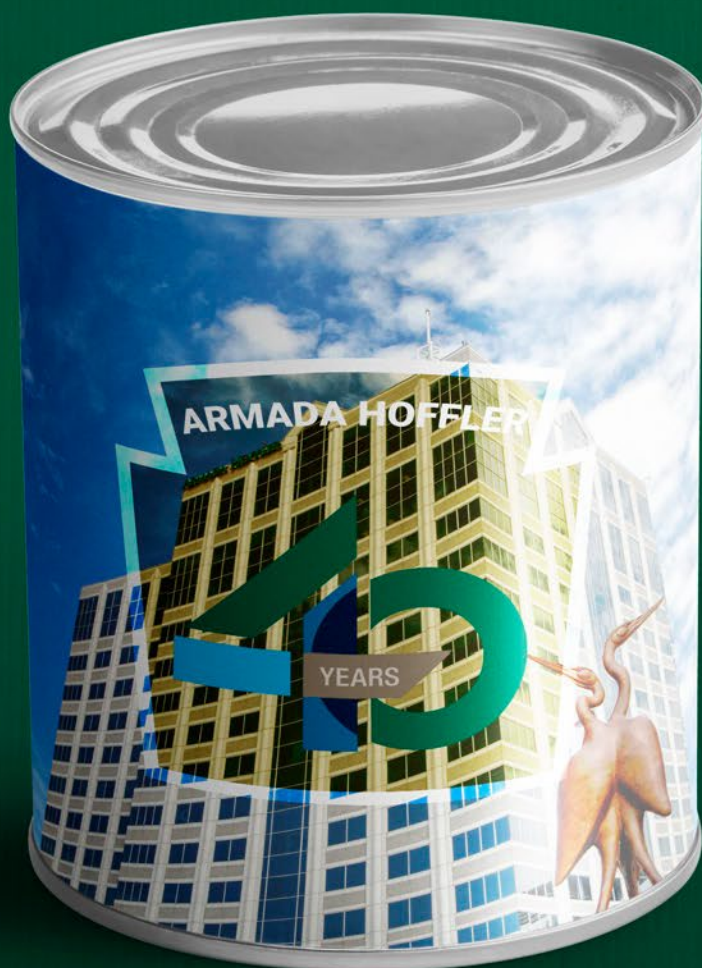


Hunger and Food Insecurity: The Root Causes and Consequences





TOGETHER WE **CAN.**

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Ruth Jones Nichols, Ph.D.
President & Chief Executive Officer



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Chair of the Board of Directors

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Dear Foodbank Partners,

In 1980, when a small group of individuals from the Southeastern Tidewater Opportunity Project (STOP, Inc.) of Hampton Roads came together to start the Community Food and Nutrition Program, it is unlikely that they knew how the program would grow. Just one year after seeds of hope were planted, that program became a nonprofit organization and one of Virginia’s first food banks.

What started as a program to serve the hungry has matured into what is now the Foodbank of Southeastern Virginia and the Eastern Shore. Our organization has grown from distributing approximately 400,000 pounds of food in its first year to distributing close to 18 million pounds of food each year since 2016. We take great pride in the accomplishment of distributing more than 300 million meals through our robust network of partner agencies and programs since incorporating in 1981. We recognize, as well, the need for our work to evolve and more holistically address the root causes and consequences of hunger and food insecurity.

In this report, “Hunger and Food Insecurity: The Root Causes and Consequences,” we offer a glimpse of the complex factors guiding the evolution of our work. We begin by articulating the difference between hunger and food insecurity, as well as highlighting the number of meals missing from the tables of our neighbors who struggle to meet their most basic needs. We also provide several illustrations to show the manner in which hunger and food insecurity intersect with other population-level variables such as income, race/ethnicity and homeownership status. Further, we offer an overview of federal legislation impacting our work to provide a framework for understanding “the cliff effect” that occurs when individuals make earnest attempts to move from poverty to self-sufficiency. We present four profiles of individuals who have experienced hunger and food insecurity to help underscore the various circumstances connected to root causes and consequences. Finally, we conclude with findings from a research study conducted in early 2019 to explore individual and systems-level root causes of hunger and food insecurity.

As we continue to evolve, we remain steadfast in our commitment to achieving the ambitious vision for a hunger-free community. We will continue to provide healthy, nutritious food for individuals struggling with hunger and begin to broker collaborative partnerships that leverage food in programs offering access to employment, higher education, housing, healthcare and financial literacy.

Thank you, in advance, for supporting our growth and journey.

Hunger, Food Insecurity and The Meal Gap

Hunger—a feeling of discomfort or weakness caused by lack of food, coupled with the desire to eat.

Food insecurity—a lack of access, at times, to enough food for an active, healthy life for all members of a given household, and limited or uncertain availability of nutritionally adequate foods.

The Meal Gap—the number of meals still missing after the Foodbank and our hunger-relief partners provide meals to plates that would have otherwise been empty.

Locality	Number of Food-Insecure Individuals	Estimated Number of Meals Missing	Number of Meals Provided by the Foodbank	Percent of Meal Gap Closed	Number of Meals Still Missing (Meal Gap)
Accomack	4,630	790,972	1,003,873	127%	0
Chesapeake	25,870	4,409,831	2,419,545	55%	1,990,286
Franklin	1,680	286,928	289,990	101%	0
Isle of Wight	3,730	636,364	469,391	74%	166,973
Norfolk	45,010	7,680,635	4,693,166	61%	2,987,469
Northampton	1,920	327,869	152,246	46%	175,623
Portsmouth	17,750	3,027,046	1,087,033	36%	1,940,013
Southampton	2,330	398,033	168,658	42%	229,375
Suffolk	11,810	2,012,893	721,695	36%	1,291,198
Sussex	2,110	359,934	116,634	32%	243,300
Virginia Beach	43,640	7,444,304	3,109,670	42%	4,334,634

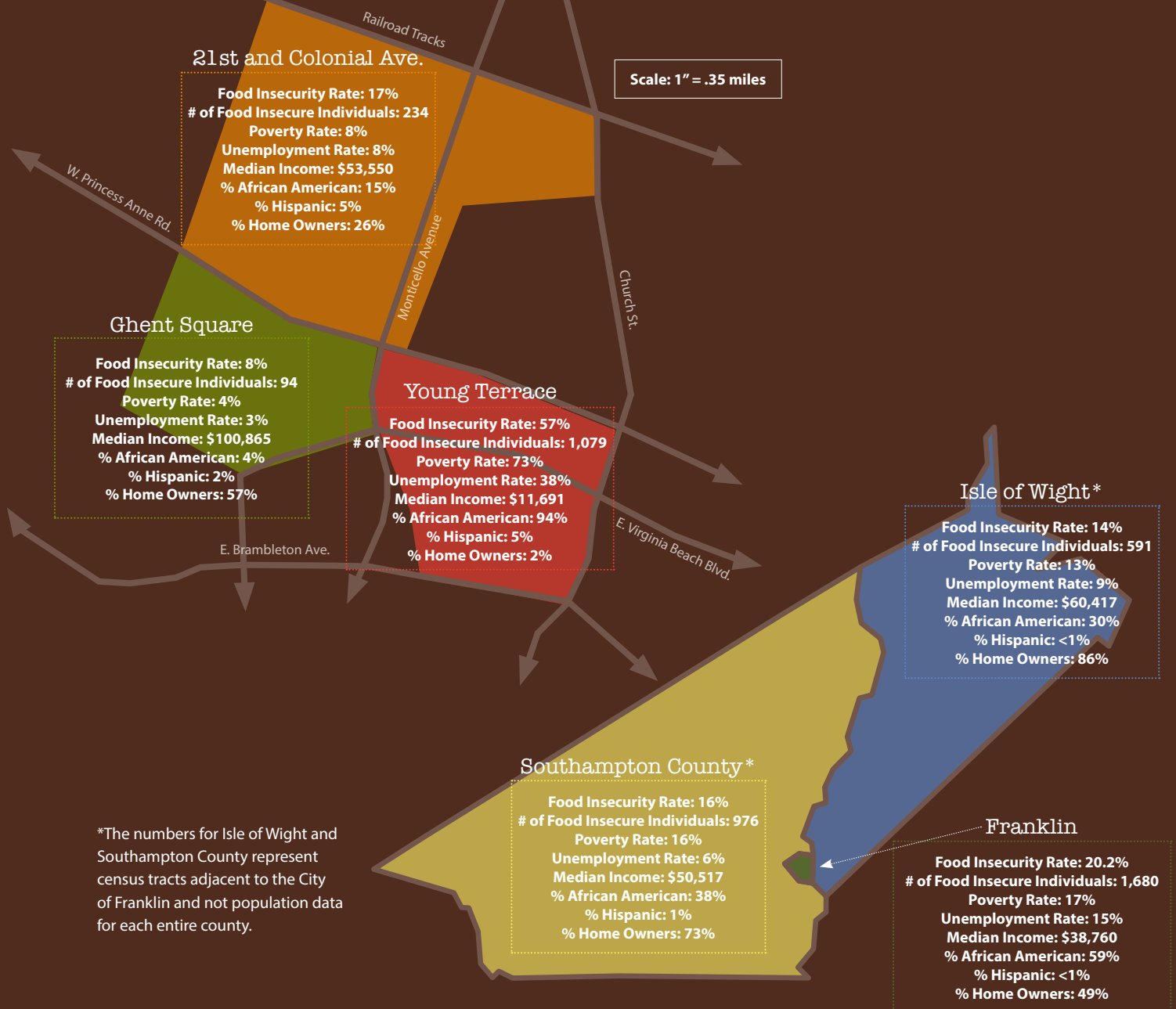
Data Sources

1. Feeding America Map the Meal Gap 2017 Overall County Food Insecurity in Virginia
2. MPIN County-Level Compliance Indicator Report for the four quarter period ending Q2 2019

Mapping Food Insecurity

The Foodbank of Southeastern Virginia and the Eastern Shore conducted extensive mapping in 2018 to identify which communities had high rates of food insecurity as well as low access to grocery stores and to layer our partners and programs over each community. This ongoing analysis highlights which communities need greater resources and creative partnerships to meet the needs of our neighbors experiencing food insecurity.

These maps highlight population-level statistics in two urban and rural communities within our service area, one in Norfolk and one in Western Tidewater—including Franklin, Southampton County and Isle of Wight County— where food insecurity disparities are most severe. These neighborhoods represent the wide range of food insecurity rates in our community, even in areas that are adjacent to one another, illustrating our reason for not only “feeding the line” but “ending the line.”



Federal Legislation that Impacts Our Work and Affects Those We Serve

The Farm Bill
 Impacts access to nutritious food for millions of American families struggling with hunger.

The Supplemental Nutrition Food Program (SNAP)

The Emergency Food Assistance Program (TEFAP)

Commodity Supplemental Food Program (CSFP)

Food Donation/Rescue

The Child Nutrition Reauthorization Act
 Helps low-income children at different ages and in different settings to reduce hunger and promote nutrition.

Child and Adult Care Food Program (CACFP)

National School Lunch Program (NSLP)

The School Breakfast Program (SBP)

The Summer Food Service Program (SFSP)

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

OTHER PUBLIC ASSISTANCE PROGRAMS
 People who are food insecure often rely on other public assistance programs to help “level the playing field” and move them closer to the self sufficiency line.

TEMPORARY ASSISTANCE FOR NEEDY FAMILIES (TANF)
 The TANF program, which is time limited, assists families with children when parents or other responsible relatives cannot provide for the family's basic needs.

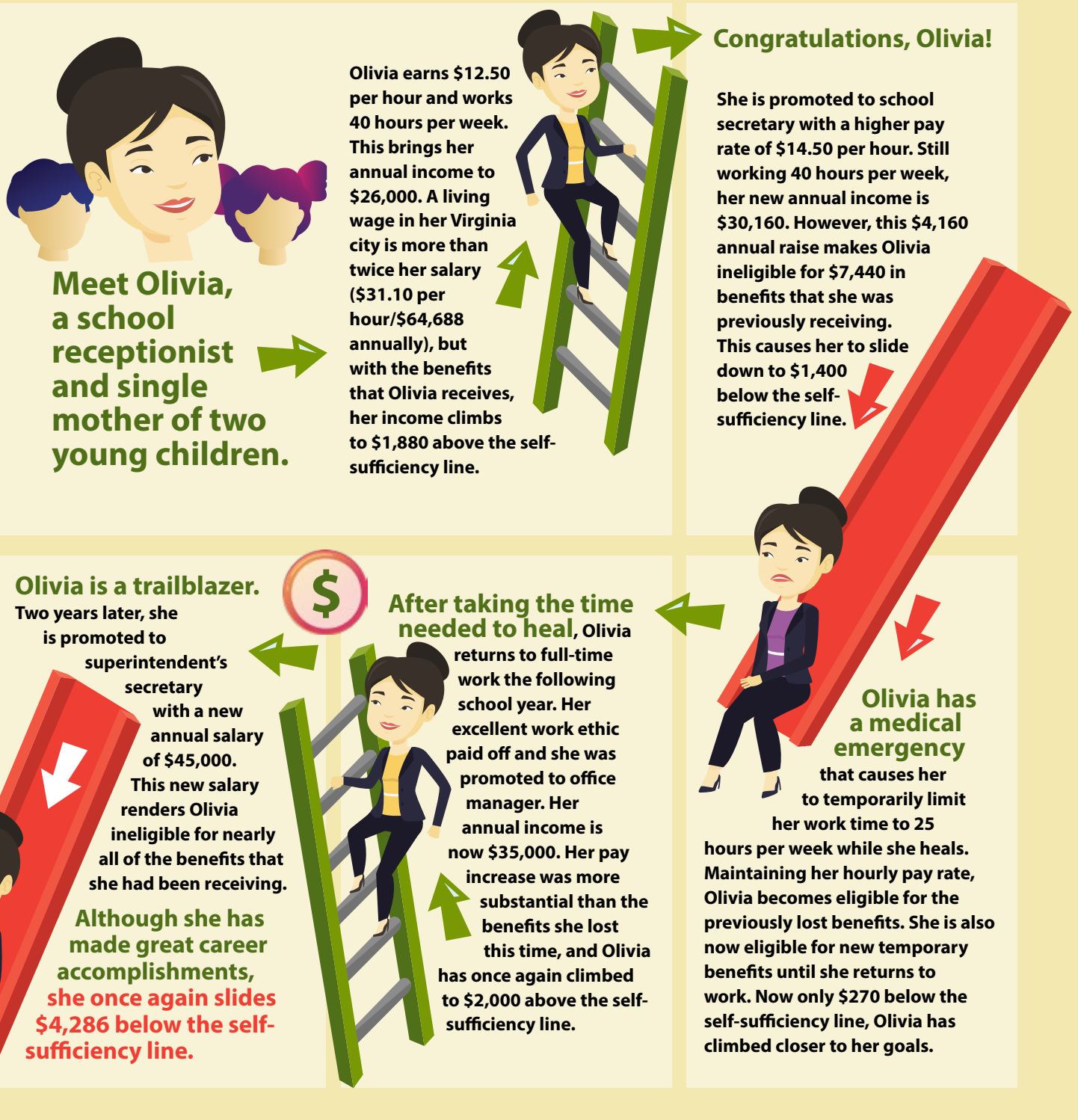
PUBLIC HOUSING AND HOUSING CHOICE VOUCHERS (SECTION 8)
 Public housing was established to provide decent and safe rental housing for eligible low-income families, the elderly and persons with disabilities.

MEDICAID AND CHILDREN'S HEALTH INSURANCE PROGRAM (CHIP)
 Medicaid provides health coverage to millions of Americans, including eligible low-income adults, children, pregnant women, elderly adults and people with disabilities. CHIP provides low-cost health coverage to children in families that earn too much money to qualify for Medicaid.

CHILD CARE ASSISTANCE
 In Virginia, the Child Care Subsidy Program provides financial assistance to eligible families to help pay for the cost of child care so they can work or attend education or training programs.

The “Benefits Cliff”

Low-income families often qualify for benefits created by federal legislation that help to cover the cost of basic necessities, such as housing assistance, SNAP (food stamps) and subsidized child care. The "Cliff Effect" occurs when families begin to lose benefits as their earnings increase. Oftentimes, the loss in benefits equates to significantly more than the increase in earnings. The result is that families earn more without improving their financial situation, which impacts their ability to become and remain self-sufficient. The self-sufficiency line refers to the amount of income necessary to meet basic needs without public subsidies.



Profiles of Hope and Perseverance – Marquitta



Like many parents, Marquitta gets creative in the kitchen in order to sneak more vegetables into her kids' meals. "If I do spaghetti, instead of doing pasta, I'll take California blend vegetables, put that on the bottom, and I make my sauce with meat and put that on top with cheese," she explains. This way she ensures her two daughters are eating healthy foods like cauliflower, broccoli and carrots while concealing the healthy flavors that kids sometimes refuse.

Still, with two growing girls in the house, it's challenging to make healthy meals last as long. "I try to improvise with it and try to stretch," she says.

Marquitta has become well versed at improvising when it comes to meals. Part of this stems from her culinary background as a professional chef. The other part comes from her experience of being homeless on and off since age 17.

Throughout her life, she has worked to overcome challenges. A decade ago when her older daughter was 2 years old and Marquitta was pregnant with her second child, her husband passed away expectantly. Down to one income, she struggled financially, veering in and out of homelessness as she raised her two daughters alone.

"I couldn't get two jobs because I didn't have somebody to watch the kids," she shares. "I would leave them at daycare until 6 because I knew that they'd get lights and water and be able to eat something." Once she picked her girls up, she would drive them to a public park, driveway or other safe location to sleep in their car. "I would stay up all night to watch my kids sleep because they were scared," she remembers. "We had to take showers in strangers' houses. My kids have been through a lot."

Lacking a stable support system, her family has relied on services from the Foodbank of Southeastern Virginia and the Eastern Shore, as well as other partner organizations to get by, although it's never quite been enough. "Inside I wanted to cry," she says. "As a parent, you'll starve yourself to feed your children. Being that you know it's not enough, I had to train my kids to eat smaller portions, and I still do it now. When you don't have enough, you just have to adjust."

Eventually, Marquitta qualified for SNAP (Supplemental Nutrition Assistance Program) benefits, but even when she was working and receiving these benefits, she still struggled to make ends meet. "That's when I started going to the unhealthy stuff," she recalls. "Noodles and ravioli—it's just cheaper to eat poorly."

In 2017, she connected with ForKids and was placed in the organization's fast track program for housing, which allowed her to move into public housing at a rent she could afford. Things were finally starting to look up.

However, later that year, she was involved in a car accident, which resulted in both her legs being broken and her neck being

fractured. "I couldn't work," she says. "I went from paying regular rent, doing for myself to, 'I can't do anything for myself.'"

Now two years later, Marquitta is still waiting to learn if she will qualify for disability. In the meantime, she's taking action into her own hands by empowering others and furthering her education.

Having lived in Norfolk's Tidewater Gardens community for just a year, she serves as president of the Tidewater Gardens Tenant Management Council where she oversees the organization and assists residents with their needs, whether it's providing information on jobs or connecting them with resources. She was elected by individuals in her community because she's come to be viewed as a person they can trust.

Marquitta is also pursuing a professional communications degree at Tidewater Community College, which she hopes to utilize in a role of life coaching or public speaking. "I empower and I talk to people every day, giving advice or challenging people" she says.

Today, even though her daughters have stable housing, Marquitta wishes that she could give them a better life—a life where they're not exposed to bullying or the sound of gunshots in their neighborhood. "They're my motivation for better; it's not about me," she says. "I want to set them up and leave a legacy for them. I don't want them to remember that we struggled."

Marquitta realizes that it takes a lot of effort to break something as steadfast as generational poverty, but she's committed to sparking change. "We relive cycles; I want to cut the cycles," she asserts. "That takes sacrifice from me."

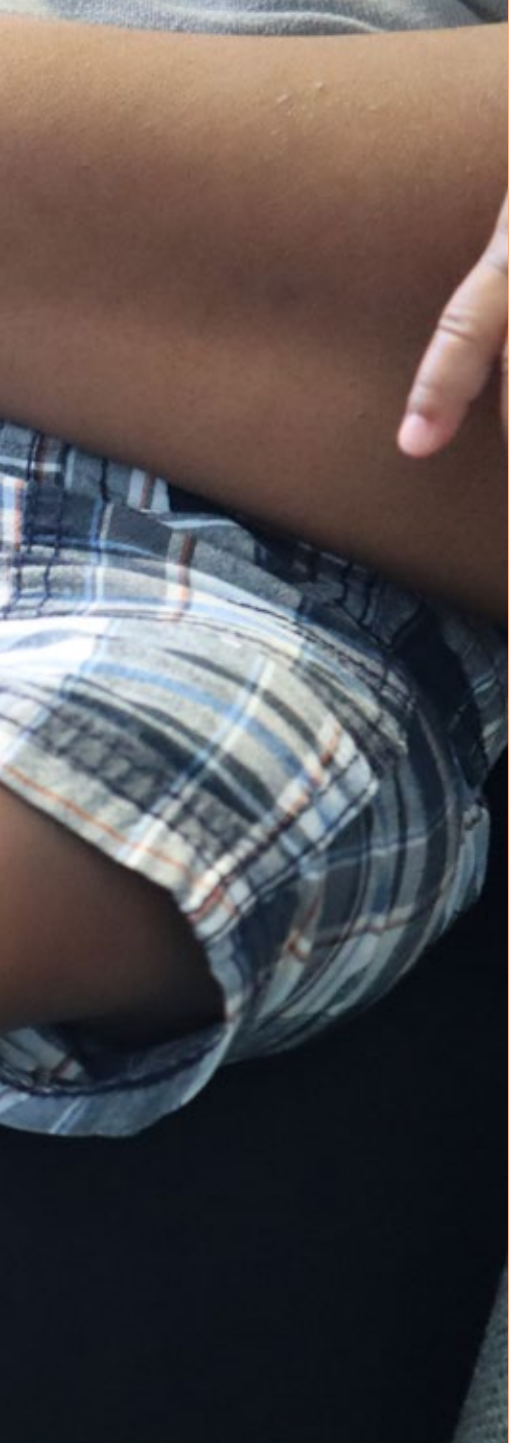


Profiles of Hope and Perseverance – **Shay**

Moving to a new, unfamiliar area and starting over completely in terms of professional contacts, resources and job searches can be stressful for anyone. Shay knows this challenge first-hand. Having moved to the region four months ago with her husband,

she has struggled to find a decent-paying job to help support their new twin babies.

Experiencing a double blessing with their twins means double the expenses. “Formula cost is a big one,” she says, adding that diapers are



another substantial expense. Their family qualifies for WIC benefits, which cover about 70 percent of their grocery needs. “But the rest—it’s like we’re still buying a month’s worth of formula because that only lasts a couple weeks,” she says.

Adding to the burden is the fact that they can’t afford childcare, so Shay is only able to work at her part-time job when her husband can care for the twins. “I can’t work as much as I want to, and we have bills to pay, we have to make sure we have water and electricity,” she explains. “When he’s home, we depend on each other.”

Unfortunately, her husband isn’t home a lot. He is serving his sixth year in the Navy and is deployed often. “He comes and he goes for weeks,” she says.

Shay understands that there is a misconception that military families are automatically financially stable. “We make just enough to pay our bills,” she says. “We stay in the house all day every day because we don’t have money to take the kids to the zoo or somewhere. We don’t have that fluidity.”

Because her husband serves in the military, Shay doesn’t always feel comfortable disclosing their family’s situation to others, including other military spouses. “It’s hard to express to the Fleet & Family—we’re really struggling. We need help.”

Shay’s situation isn’t rare. One in five households served by the Feeding America network includes a member that has served in the US military. In Virginia, an estimated 21 percent of households served by Virginia food banks report that someone in their household has served or is currently serving in the U.S. Armed Forces or as a member of the military Reserve or National Guard.

Like many military families, Shay describes certain obstacles that her family has had to navigate. For example, the money that her husband receives from a basic allowance for housing (BAH) is enough to cover the rent but no additional utilities, which leaves them financially strapped when it comes to providing all the other basic necessities for a family of four.

When money has gotten especially tight, Shay has come to the Foodbank of Southeastern Virginia and the Eastern Shore for assistance, receiving necessities like diapers, wipes and formula. The Foodbank has also provided her with information to apply for online jobs, which could bring in extra finances when she’s unable to leave the house, and SNAP (Supplemental Nutrition Assistance Program) benefits, which would assist in their grocery expenses. “It’s helped,” Shay says. “Knowing that there are resources that I can take advantage of.”

As for Shay’s future, she looks forward to a time when she can secure a better paying job, when her family can afford childcare and when they can live life to the fullest with their double blessings. But for now, figuring out the basic necessities is her biggest concern. “I just want my kids to be safe,” she says. “I want to ensure that they have food in their mouths.”




Profiles of Hope and Perseverance – **Jodi**

Sixty-four-year-old Jodi sits quietly in her living room on Virginia’s Eastern Shore, her hands steadily at work as she sews an outfit for a stuffed pig. “I sewed the pig first, and now I’m making it an outfit,” she says cheerfully. Most of her days are spent this way—sewing,

reading or watching her favorite TV shows. “I try to keep my mind occupied,” she says. “And I’ve got my kitty cats. They’re a lot of company.”

She doesn’t receive a lot of visitors these days. “Now that I’ve gotten to be a senior citizen, it feels like nobody really wants to be around



you,” she says. Her kids are grown and stay active with their own kids’ extracurricular endeavors, and her husband works a lot. Even though her days are quiet, she remains optimistic. “I try to put my best foot forward. I’m doing fairly good for an old lady that’s been through hell,” she laughs.

Jodi has lived and worked on the Shore all her life. She was a cosmetologist for more than 20 years before going back to school to become a nurse. Just before she started the program, however, she was diagnosed with cancer at only 37 years old.

She began radiation treatments and underwent major surgery just two months before starting classes. Complications from her treatments required her to receive blood transfusions three days a week as she was earning her degree. “But I maintained a B average,” she says with a grin.

In 1996, she graduated from nursing school and worked in different hospitals and nursing homes until February 2017 when the medical facility where she was employed suddenly went out of business.

She filled out the necessary forms to begin collecting unemployment, but the very next month, she fell and broke her leg. “I haven’t been able to work since because I can’t get around very good,” she says. Jodi can walk short distances using a walker but otherwise relies on a wheelchair. The injury has rendered her unable to receive unemployment. Six months after breaking her leg, she started collecting disability, but it’s not enough to get by.

Jodi relies on her husband’s assistance for most routine activities, like bathing, getting dressed and preparing meals. “If it wasn’t for him, I’d probably be in a nursing home,” she says. “He has so much to do, but he don’t seem to mind. He’s a good man.”

She and her husband have dietary restrictions stemming from health issues. After complications

from radiation treatment, Jodi is now on a no-fiber diet, which vastly limits the options of fruits and vegetables she can eat. Her husband suffers from a thyroid condition, which has caused him to lose a substantial amount of weight.

Their biggest challenge with food, however, is not having the money to buy it.

They’ve benefited from the Foodbank’s food distribution, although Jodi relies on her husband to pick up the foods since she can’t get out on her own. Most days, he can’t afford to take off work to be at the Foodbank during distribution times, leaving them to choose between dollars and free food. “Trying to get food on the table is a challenge,” she says. “When you lose a large income, anything helps.”

When she was working, Jodi was the major breadwinner of their family. “I went from a great big salary to \$1,200 a month,” she says. Down to one salary and faced with a mountain of medical bills from combined health issues, the couple struggles to get by.

Jodi and her husband experience some of the same challenges as nearly 5 million senior citizens in our country. After a lifetime of hard work, 63 percent of households with older adults that Feeding America serves find themselves having to choose between groceries or medical care.

The couple is left to make sacrifices wherever they can to get by. When they don’t have the means to buy something, they have learned to simply do without and rely on items they’ve stored in the freezer for emergencies. “It’s things you don’t particularly want,” she explains, “but it fills the hole up.”

Jodi’s goals for their future are modest—she doesn’t want her or her husband’s health to decline further, and she hopes to be able to walk again one day. Until then, she’s determined to make the best of their situation. “I don’t sit around and harp on being sick and not feeling good,” she says. “There’s just no need.”

Profiles of Hope and Perseverance – LaVonne

T

hose who know LaVonne understand that he's always on the run. As a fitness trainer, he literally runs along Norfolk's sidewalks each day in order to stay healthy and keep an active lifestyle. As a single father of two, he runs from one commitment to the next to ensure that his kids' needs are being met.

Like any proud parent, he beams as he touts his children's good grades and works hard to provide for them—so hard, in fact, that he's currently working four jobs to keep his family afloat.

The most challenging part of working so hard is that he loses out on spending time with his kids. "I have less time than I have anything else in the world right now," he says. "It's literally a mountain to schedule things or spend time with my family."

The other challenge he faces is food insecurity. Because he works hard and has reached a certain income level from his four jobs combined, he's ineligible for benefits like SNAP (Supplemental Nutrition Assistance Program) or TANF (Temporary Assistance for Needy Families), which could enhance his family's financial situation. "I don't get that type of assistance, and it is a struggle," he admits.

LaVonne says food is the biggest expense for his family, especially during the summer months when they don't have access to school breakfasts and lunches.

Having the knowledge and resources from being a fitness trainer, he understands the importance of buying and preparing healthy foods for his family. "I work, eat, live and breathe fitness and wellness, and even I have trouble making the

best decisions," he says, acknowledging that it's more expensive to buy fresh foods. "A salad is \$5 and a cheeseburger is \$1. If you brought up a food disparity study and an income level or housing level study, the correlation you'd find is that poor people eat badly."

His second largest expense is housing, taking up 30 percent of his income. "It's between food and having a home—which are the biggest things in the world, stuff you've got to have," he says.

When funds are running low, LaVonne utilizes services at the Foodbank of Southeastern Virginia and the Eastern Shore, including the Backpack Program and the USDA Distribution, where his family looks forward to receiving fresh fruits and vegetables. "The Foodbank is conscious about the foods that people should have in regards to eating healthy and nutritious. The first time I ever had a radish was from the Foodbank," he laughs. His kids, on the other hand, love receiving sliced apples because it's a healthy treat that's ready to eat.

Along with utilizing the Foodbank's services personally, LaVonne has connected with the Foodbank to receive food for events held in his community, Young Terrace, in which he is the past president of the Tenant Management Council. In this role, he connected residents with services and resources to help them in their quest for sustainability and financial freedom.

Furthering his community involvement, he serves as a member of the Norfolk Mayor's St. Paul Advisory Committee, established to provide leadership and work collaboratively with area residents on the revitalization of the

St. Paul's area. "I am the direct link to the people being affected by what's happening," he says. "I make sure that everything stays on par, that it's in the best interest for the community for those who currently live there." LaVonne uses his voice to represent his neighbors, ensuring that the residents' needs will be heard. "Being a minority and being in a socioeconomic category puts your voice way at the bottom of the totem pole sometimes, so I want to make sure I'm doing my best and properly representing my community."

Even in bleak circumstances, LaVonne remains hopeful that his hard work will pay off and that his family's future will be bright. "I think things are continuously getting better. It just takes a lot of work on everybody's part, especially my own," he notes. "I'm trying to work hard and play the game the way I'm supposed to. It's a good feeling when you work toward something and earn it."



Exploring the Root Causes of Hunger and Food Insecurity

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ABSTRACT

Hunger is a prevalent problem in the U.S., and approximately 40 million individuals experienced food insecurity in 2017, according to the United States Department of Agriculture (USDA) and Feeding America. Although poverty is a primary factor contributing to the hunger problem, little is known about the root causes of hunger in low-income populations. The Foodbank of Southeastern Virginia and the Eastern Shore ("Foodbank") commissioned researchers from Old Dominion University to conduct a research study and explore the root causes of hunger and food insecurity among its clients. The study, including qualitative and quantitative research methodology, was conducted from September 2018 to March 2019 and included in-depth interviews with 32 clients, focus group interviews with 25 representatives from Foodbank partner agencies, and a survey of 578 clients.

Based on the qualitative interviews and focus groups, several themes emerged related to the root causes of hunger and food insecurity, including: a) The life course perspective of hunger: The root causes of hunger often began in the early years of the clients' lives without sufficient financial education; b) Fragmented social welfare system: Clients identified housing and utilities as the top two expenditure items, even above the priority of food. Given rising housing costs and lack of housing assistance, food security is difficult to achieve without housing security and coordinated social welfare programs that address gaps in income; c)

Isolation: Seniors were isolated from family members or friends and lived alone for a variety of reasons. Without social support, they were vulnerable to negative events in their lives, which resulted in food insecurity.

Among the individuals receiving food assistance who completed surveys, 80.3% were aged 50 or older and 81.7% met the definition for food insecure in the last 12 months, using the United States Department of Agriculture screening tool. Approximately 70% of the clients had experienced major negative events in life, such as a disability or lay-off. Having experienced these events was significantly associated with food insecurity ($P < 0.001$). Although 60.5% of the clients experienced childhood hunger, only 31.7% received financial education during childhood. Learning to budget and having food security discussions during childhood were significantly related to food security status at the time of our study ($P < 0.01$). Regarding expenditure priorities, 91.3% of clients ranked housing as their top priority. The significant negative factors identified from the regression analyses included number of negative life events, experiencing childhood hunger, number of children in household, renting their residence as opposed to owning, and part-time employment. Significant protective factors included having friends that could offer financial support, receiving financial education during childhood, and having housing or transportation assistance. These quantitative results were consistent with the emerging themes identified in the qualitative component of the study.

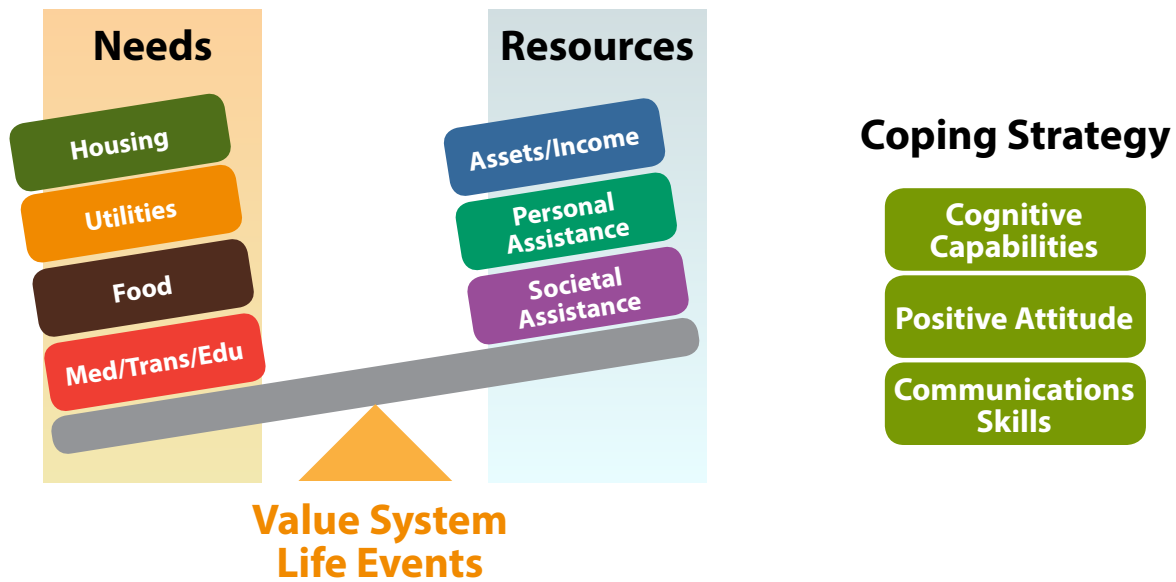


Figure 1. Conceptual Model to Explore the Root Causes of Hunger

Although this was a pilot study to explore the root causes of hunger and food insecurity, the results can provide important insights. From a micro and individual level perspective, the roots causes of hunger and food insecurity may be embedded in the early stages of clients' lives, given that they often did not receive adequate financial education on things such as budgeting during those years. As a potential result, food insecure individuals were thus less prepared when hit by negative events in their later life stages. Further, isolation prevents many individuals who are food insecure from seeking additional personal support. From a macro and systems-level perspective, the fragmented social welfare system is unable to provide comprehensive assistance to individuals in ways that holistically address their needs. Therefore, hunger and food insecurity are not only the result of poverty, but a result of individual, family, and societal factors across a lifetime.

A. INTRODUCTION

Food insecurity is defined as “a lack of consistent access to enough food for an active, healthy life” and approximately 40 million individuals in the nation experienced food insecurity in 2017

(USDA 2018; Feeding America, 2019). The U.S. has established a comprehensive social nutrition safety network comprised of two pillars: 1) federal food assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), The Emergency Food Assistance Program (TEFAP), the Child and Adult Care Food Program (CACFP), and the National School Lunch Program (NSLP), and 2) community-based emergency food assistance programs, such as food banks. However, food insecurity is still prevalent, which continues to put pressure on local food banks.

In order to address the ongoing prevalence of food insecurity and need for innovative approaches that more comprehensively address the root causes of hunger and food insecurity, the Foodbank of Southeastern Virginia and the Eastern Shore (“The Foodbank”) adopted its new strategic plan in June 2017, which prioritizes “developing a hunger-relief logic model that incorporates a multi-faceted approach to feeding the line and ending the line” (Jones Nichols, 2018). To support the Foodbank’s goal in developing the approach, a better understanding of the root causes

of hunger and food insecurity was required. Identifying and trying to remedy these causes could be challenging since they could be embedded deeply in individual lives or in interactions within households, institutions (e.g., workplaces), communities, and the overall society. In this pilot study, we aimed to explore some of the root causes from the individual and household perspective and adopted a conceptual model based on a literature review to guide the investigation (Figure 1).

This “seesaw” model indicates an unbalanced life challenging Foodbank clients on a daily basis. When the resources they acquire do not meet their various needs, they must employ coping strategies, which depend on cognitive capabilities, positive attitudes, or communication skills. Moreover, their value systems and past life events cast the influence on their current lives. Food insecurity is the outcome of the unbalanced life at an extreme level.

B. METHODS

B.1. Overall Approach

We adopted a mixed methods research design that incorporated qualitative and quantitative methodology. The qualitative component was a combination of in-depth interviews with clients and focus groups with representatives from the Foodbank and its partner agencies. We transcribed all interviews and conducted analyses using NVivo 12® to identify the potential themes that might be related to the root causes of hunger and food insecurity. Based upon these emerging themes, we developed a survey questionnaire that was distributed in the Foodbank’s service area. We conducted statistical analyses to further explore the root causes of hunger and food insecurity. With this holistic approach, we were able to identify potential root causes of hunger and food insecurity, as revealed by both qualitative and quantitative evidence.

B.2. Methods of Qualitative Study

In November 2018, we interviewed 32 clients across six sites in six cities (Chesapeake, Norfolk, Portsmouth, Suffolk, Tasley, Virginia Beach), which included the Foodbank primary facility in Norfolk and its Eastern Shore Branch in Tasley. On food distribution days, we introduced the project briefly to individuals waiting line for food assistance. When individuals expressed an interest in participating, the interviewer asked two food insecurity screening questions that have been tested for validity and reliability in prior research studies (Hager et al., 2010):

- “Within the past 12 months, were you worried whether your food would run out before you got money to buy more? (Yes/No)”
- “Within the past 12 months, did the food you bought just not last and you didn’t have money to get more? (Yes/No)”

If one of the answers was yes, then the subjects were screened as food insecure, deemed eligible for the interviews and invited to participate. After the client completed the one-hour, in-depth interview, a \$10 retail store gift card was provided as a token of appreciation.

After the client interviews, we conducted three focus group interviews with the Foodbank and partner agencies’ representatives in Norfolk (N = 8), Eastern Shore Branch (N = 5), and Portsmouth (N = 13). The main purpose of the focus groups was to explore the root causes of hunger and food insecurity from the agency or staff representatives’ perspective. All interviews were transcribed and analyzed to identify emerging themes.

B.3. Methods of Quantitative Study

Based on the themes identified from the qualitative study, we drafted survey questions and refined them with the staff and clients of the Foodbank to ensure that proper answers could be solicited with minimum confusion and

reporting bias. Since it was a voluntary survey without any monetary incentives, we adopted a convenience sampling approach to select clients in the Foodbank service area. A total of 578 clients from 23 partner agencies completed the surveys in later January 2019. We used Stata 14® to conduct all the statistical analyses. Descriptive statistics of the variables were estimated to assess the overall quality of the surveys. T-tests and chi-square tests were applied to examine the statistical significance of the characteristics between food secure and food insecure clients. Then, multivariate logistic regression analysis was utilized to examine whether the root cause variables that emerged during the qualitative study were significantly associated with food insecurity among the survey clients. $P < 0.05$ was treated as statistically significant.

C. RESULTS

C.1. Selected Findings from the Qualitative Study

We identified the following themes from the qualitative study.

C.1.1. Lack of Financial Education during Childhood

We asked about clients' food insecurity experiences in childhood and whether their parents had prepared them to manage their lives financially, such as by teaching them to save or how to make a household budget balance. Two-thirds of clients said that they did not experience food insecurity during childhood and their guardians ensured that food was available. Only 18.8% of clients remembered that they experienced food insecurity during childhood. Few of them remembered their guardians teaching them about how to save and how to be prepared for potential food insecurity or hardship. When they became adults, individuals surveyed indicated they were not well prepared for the hardships they could face. If they experienced any negative

Box 1: Quotes about Food Insecurity and Financial Education in Clients' Childhood

Client A: "When I was little, I didn't have to worry about (food). You know, 'cause mama had it."

Client B: "I was the only child...; they brought good food and stuff. You know, I never had to worry about that."

Interviewer: "So when you were young did your family or your mother teach you examples on how to manage money or food problems?"

Client C: "No."

Interviewer: "So did your mother ever tell you how to manage money or how to save when growing up at all?"

Client D: "No."

events, e.g., lay-off or divorce, they were at risk of experiencing food insecurity (Box 1).

The lack of financial education was reflected in other root causes, as well, when clients tried to manage their limited resources given the various needs in their lives.

C.1.2. Housing or Other Higher Priority Expenditure Items Threaten Their Food Security

Clients often face the challenge to use limited resources for various expenditure needs. Addressing this challenge requires sophisticated planning and good execution, assuming they are willing to compromise between expenditures on different needs, especially on items they have given a higher priority. When asked about their expenditure priorities, the clients consistently ranked food as the secondary or tertiary item, usually following housing and/or utilities (Box 2).

Box 2. Quotes about the Priority of Their Expenditures

Client E: "I have to have a roof over my head, that's my priority, and TV, I have to pay Verizon cause that's my internet, I must have internet, that's mandatory for me."

Client F: "The first thing I would cut are all the little bills. I have to pay the rent and for the lights."

Interviewer: "What would you say is more of a priority? Would you say the rent?"

Client G: "Ain't nothing going on but the rent."

Then, we asked them about how they allocated their resources and the rationale behind the allocations. We found that clients with fixed incomes, e.g., Social Security Income (SSI), often spent a disproportionately high share of that income on higher-priority items, such as rent or automobile expenses.

Instead of using all their resources in a proportional way to meet all their needs, the clients often allocated the resources based on the priority of each need, following their list from top to bottom. In contrast to food costs, which are spread across time, these high-priority bills, including housing or utilities, often came at the beginning of the month and often matched their fixed income payment cycle. When asked about the possibility of reducing their expenditures on these high-priority items, some clients expressed necessity of the expenditure based on their value systems.

In summary, without having full security in housing or other higher priority expenditure items, food security could be threatened or even sacrificed.

C.1.3. Negative Life Events Challenge the Clients' Capabilities to Seek Food Security

We asked the participants about possible life events that could lead to their current food insecurity status. Not surprisingly, some clients experienced a series of negative life events, which included but were not limited to: a) parents, guardian, or spouse/partner passed away; b) divorce; c) job termination, such as lay-off, including other family members being laid off, or the employer went out of business; d) imprisoned; e) severe health problem of themselves or their family members, especially of their children, e.g., lupus, cancer, or severe depression; e) Short-term and long-term disability (some related to injury in workplace).

Usually one or two "signature events," such as divorce or death of a spouse, turned the clients' lives away from their normal tracks. Afterward, a series of events following the signature event often put them into the "poverty spiral," from which they felt they were unable to escape or deal with. The three most-mentioned negative events directly related to food insecurity were in the areas of job, family and health.

The job-related events included lay-off, the employer going out of business, or work-related injury. For example, after one client was laid off, he tried to call his creditors to ask them to work with him, including banks, the mortgage company, and a car loan company.

"Nobody worked with me. Absolutely nobody. And so, I lost everything. ...Everything is gone."

The family-related events include loss of a spouse through death or divorce. For example, after one unemployed client's spouse had passed away, she received her widow's benefits. However, this caused her to have an increased income, making her no longer eligible for SNAP benefits while her Section 8 subsidized rent increased more than 10-fold. The increase in her income due to receiving her widow's benefit

was unable to cover the loss of her benefits from SNAP and Section 8. Given her changing life environment, the client was unable to adjust her life swiftly while she kept making her car or other payments, which results in food insecurity.

"I realized that after I paid my bills I had no money left for food."

The health-related events included the clients being sick, themselves, or their family members being sick. The clients' illnesses included disability, which often resulted from work-related injury. Although most of them had Medicaid, their ability to work was reduced due to their illness or their commitment to taking care of their ill family members, such as spouses or children. Among the 32 clients, we identified the following sickness of the clients or their family members: HIV+, foot surgery from fallen arch, broken ribs, diabetes, missing cerebellum, various cancers (throat cancer, colon cancer, and liver cancer), injured shoulder, depression, COPD, kidney loss due to cancer, Celiac disease, Crohn's disease, blood clots in lungs, multiple mental health conditions (e.g., deep depression, bipolar disorder, agoraphobia), Lyme disease, blindness in one eye. These wide-spread health issues prevented them from working, although Medicaid paid most of their health expenditures.

The clients had often experienced two or more negative life events, which threatened not only their income-earning capabilities but also their willingness and capability to seek public or private assistance. These negative events could cumulatively increase their learned helplessness so that they were willing to accept the "status quo" with little struggle to reach food security.

C.1.4. Social Isolation Made Clients Vulnerable to Food Insecurity When Experiencing Economic Hardship

Among the 32 clients, 50% lived alone and an additional 28.1% lived with one more family member. Some clients had multiple siblings and adult children, but 53% of the clients indicated

Box 3. Quotes about Asking Assistance from Family Members

Client F: "Until they knew because my children know that I only come to them if that is a must. So, no, I waited to the last minute."

Client H: "It's not very often. If I'm really down to my last then I'll call family and I'll say can you help me out with this or can you help me out with that."

Client I: "If I get in a real financial bind or something like that I can go to my mom, but, you know, I'm a proud person."

Client J: "I got 12 sisters and brothers, but we don't communicate."

that either they didn't ask for help from these family members or these family members wouldn't help them for various reasons. Several clients indicated that they tried not to ask for help from family members and even put them as their last resort if asking for help (Box 3).

The clients were more likely to receive assistance from friends than family members. Some of their friends included neighbors or colleagues, who provided occasional monetary or food assistance. However, for others, the same social isolation happened in that they tried not to bother their friends for assistance.

Social isolation resulted in their relying on individual resources or seeking government or community resources to combat economic hardship. This could be challenging and beyond the personal capabilities of some clients to navigate through the complicated social welfare system.

The extensive interviews with the clients significantly deepened our understanding of the complicated dynamics in their lives that systematically caused food insecurity.

Due to lack of financial education, clients could live with no savings or few other resources. When negative events hit in their lives due to personal or external factors, they were unable to adjust their expenditure priorities to maintain food security and meet other living needs. Due to social isolation, they could only rely on themselves or seek additional government assistance, which because of its complexity could be beyond their capabilities to accomplish. These life challenges collectively put them into a learned helplessness mode so that eventually they ended up with chronic food insecurity.

C.2. Selected Findings from the Quantitative Study

Table 1 presents the descriptive statistics of the survey sample. Notably, 70% of the survey participants were aged 50 or older, and two-thirds of them were non-Hispanic Black.

The single-person family consisted of 38.8% of the survey participants. About one-fifth of the participants owned their residence, while 58.6% rented and 14.5% lived with others. Less than 20% of the participants had either a full-time or a part-time job. Food insecurity was severe among most participants (81.7%), and 45.7% had very low food security, which indicates the magnitude of the challenge to eliminate hunger in Hampton Roads. The age group of 50-59 had the highest prevalence of food insecurity (87.5%), while the participants aged 60 or older had the lowest rate of food insecurity (73.7%) ($P < 0.001$). The participants living without children had a significantly lower prevalence of food insecurity (76.4%) than others with children ($P = 0.006$). The participants who owned their residence or lived with others had significantly lower rates of food insecurity (69.9% and 76.5%) ($P < 0.001$). Individuals who indicated a part-time employment status had the highest rate of food insecurity (94.6%), while the retired group had the lowest rate (64.3%) ($P < 0.001$).

Table 1. Socio-demographics of the Survey Participants (N = 578)

Variables	%	SE
Age Group		
< 50	29.7	1.92
50-59	30.9	1.94
60 or older	39.4	2.05
Race		
Non-Hispanic Black	67.0	1.98
Non-Hispanic White	19.2	1.66
Hispanic	10.3	1.28
Other	3.6	0.78
Number of Adults in Household		
1	38.8	2.05
2	24.0	1.79
3	16.6	1.56
4	13.9	1.46
5 or more	6.7	1.05
Number of Children in Household		
0	57.7	2.09
1	16.3	1.57
2	8.2	1.17
3	10.4	1.29
4 or more	7.3	1.11
Housing Status		
Own Residence	20.2	1.70
Rent	58.6	2.08
Living with Others	14.5	1.49
Homeless or in Shelter	6.8	1.06
Employment Status		
Full-Time	9.4	1.23
Part-Time	9.9	1.26
Unemployed	24.5	1.81
Disabled	30.7	1.94
Student	3.2	0.74
Retired	17.4	1.60
Other	5.0	0.92
Food Security Status		
Food Secure	18.3	1.61
Low Food Secure	36.0	2.00
Very Low Food Secure	45.7	2.07

C.2.1. Social Isolation and Food Insecurity

Among the family members and friends, mothers were the most likely to provide food assistance (59.8%), followed by adult children, other family members, siblings, and fathers as the least likely (50.6%). Interestingly, 56.7% of participants indicated that there was no friend to provide food assistance and 19.6% of participants mentioned only one friend to help.

Overall, food insecurity was not significantly different by family members' assistance, except 13 percentage points lower in food insecurity with siblings' help ($P < 0.001$). Participants with three or more friends' assistance had an average food insecurity rate at 67.3%, while over 80% of those with two or fewer friends' help were food insecure ($P < 0.04$). Interestingly, participants with no friends had similar food insecurity rates as those with one or two friends to help.

C.2.2. Negative Life Events and Food Insecurity

Participants experienced a variety of life events "happened ever" or "in the last 12 months." The most frequent negative event in the last 12 months was disability (40.1%), followed by lay-off (25.4%), and divorce (23.0%). Approximately, 13.3% of participants experienced spouse death, and 6.2% of participants experienced child death. Further, 10.7% experienced foreclosure or car repossession, while 7.4% of them were imprisoned. In their whole lifetime, 71.9% of participants had experienced at least one negative life event, and 32.7% of them had experienced two or more negative events. Lay-off and disability were significantly associated with higher food insecurity. Participants who did not experience lay-off had 15.5 percentage points lower food insecurity, while those who did not experience disability had 14.1 percentage points lower food insecurity. Both were significant ($P < 0.001$). Moreover, food insecurity was higher among participants who had experienced any negative life events (all over 84%) compared with those who had not

experienced any negative events (68.0%). ot experienced any negative events (68.0%).

C.2.3. Childhood Hunger, Childhood Financial Education, and Food Insecurity

Among the survey participants, 60.5% of them reported having experienced childhood hunger, and less than 50% of them learned personal financial skills during childhood or ever had a discussion about how to achieve food security. Participants who experienced childhood hunger had almost 20 percentage points more food insecurity than participants who didn't ($P < 0.001$). Participants who learned to budget resources and had discussions on seeking food security during childhood had 10 percentage points lower food insecurity than those who did not receive this education ($P < 0.01$).

C.2.4. Budget Priority and Food Insecurity

Among the participants, 91.3% of them ranked housing as the first priority, and 62.3% of them ranked utilities as the first or second priority. Only 11.4% of participants ranked food as the first priority, and 28.9% ranked it as the second priority. The most prevalent ranking of food was as the third priority (43.6%). The food insecurity rate was higher in the participants who ranked housing as the first priority versus those who ranked it as the second or lower (81.6% vs. 76.9%). Similarly, participants who ranked utilities as their second priority had the highest food insecurity rates compared with the other two groups (84.9% vs. 71.4% and 77.2%). Participants who ranked food as the top priority had the highest food insecurity rate (88.2%), but participants who ranked food as the third priority had the second-highest food insecurity rate (85.4%). However, all these disparities in food insecurity were not statistically significant ($P > 0.05$).

C.2.5. Results from the Multi-factor Analyses

After combining multiple factors in the logistic regression model, several factors had significant associations with food insecurity. Number

of friends to help significantly reduced food insecurity (OR = 0.69, P = 0.003). Number of negative life events was significantly associated with higher food insecurity (OR = 1.59, P < 0.001). Learning how to budget was the most significant factor in all childhood financial education factors for reducing food insecurity in adulthood (OR = 0.38, P = 0.001). Experiencing childhood hunger was a strong predictor of food insecurity as an adult (OR = 3.09, P < 0.001).

In summary, the qualitative study identified emerging themes related to the root causes of hunger and food insecurity that could be further explored. The quantitative study explored the statistical significance of the emerging themes using bivariate and multivariate analyses. The mixed method approach helped to deepen our understanding of the root causes of hunger and food insecurity among individuals seeking assistance from the Foodbank.

D. DISCUSSION

This is the first study of the root causes of hunger and food insecurity in the service area for the Foodbank of Southeastern Virginia and the Eastern Shore. We did not expect to complete the task of fully understanding all root causes in one exploratory study, but the findings could be important leads for further efforts to identify individual and systems-level factors related to root causes. To probe these causes, we adopted a life course perspective and proposed that early life events can embed the root causes for food insecurity into later life stages (Najman et al., 2010). These early life events included childhood food insecurity (Chilton et al., 2017), financial literacy and financial skills (Kim et al., 2013), and other early life negative events (Luby et al., 2013). Both the qualitative and the quantitative results suggest that at least half of the clients were not prepared to battle financial hardships before they went into adulthood. These educational efforts are often a part of the high school curriculum, but taking them is often optional. However, it might be too

late to teach these skills in high schools, since adolescents may have already developed their spending habits and consumption behaviors (Amagir et al., 2018). Lack of systematic education of our next generation regarding financial skills could be one root cause of not only hunger but intergenerational food insecurity—a cycle that is hard to break.

Food insecurity, our studies show, is not an independent concept or subject that is far removed from other securities, such as housing security and job security. Given the high priorities people place on meeting housing and utility needs first, society should create effective integrated social welfare programs to ensure these basic needs are addressed, which will help end hunger indirectly. However, the housing assistance budget in terms of percentage of GDP has decreased gradually from a peak in 1995 (0.36%) to a low point in 2014 (0.25%), while low-income households with housing needs increased from \$16.5 million in 1999 to \$27.9 million in 2016 (Rice, 2016). In addition, the funding situation for housing assistance significantly deteriorated after the Budget Control Act (BCA) of 2011, which implemented a mandatory sequestration through 2021. Housing assistance funding fell by \$6.2 billion, or 13.3%, annually after inflation adjustment, which resulted in 100,000 fewer families receiving housing assistance in 2014 than in 2010 (Rice, 2016). Given these deteriorating funding situations, the Foodbank may work with other public and private agencies more collaboratively to promote food security.

Individualism and social isolation reduced the resistance to hunger (Samuel et al., 2018). The underlying value system of each client can influence to whom they go to seek assistance and how they express their need for assistance. Individualism may make most clients determined to resort to their own mental powers to cope with food insecurity, instead of relying on others to help. Our results suggest that friends can be more important than family members

in addressing food insecurity. Having a few more friends can help significantly decrease the chance of food insecurity. However, the qualitative results showed the determination of some clients not to ask for others' help, even their closest family members. Although an individual value system is tough to influence, the Foodbank or other agencies may need to think more about innovative ways to shape their clients' ideals and attitudes (Carroll et al., 2018).

Although this study generated several important themes and possible leads as to the root causes of hunger and food insecurity, we still need to acknowledge its limitations due to the exploratory nature and limited scope. Other societal factors, such as housing segregation and food environment were not addressed in this study but are surely worth exploring in future research.

E. CONCLUSIONS

This study was one of the first efforts to pursue a significant question: "What are the root causes of hunger and food insecurity?" The answers to this question can help implement the strategic plan of the Foodbank but also guide the Foodbank's future operations. In general, we found that food insecurity was related to other insecurities, such as housing insecurity and job insecurity. To reduce food insecurity in adulthood, one important possible approach is to intervene in early life by teaching children the skills they will need to be more prepared for future hardship in adulthood. In addition, fragmented social welfare programs currently lack the coordination necessary to assist clients with a holistic approach, while individualism and social isolation serve to create a more desperate environment for clients caught deeply in the poverty spiral. All these factors can interact and jointly cause hunger or food insecurity among Foodbank clients.

Understanding the root causes of hunger and food insecurity is only the initial step. The

next step is more important: how to leverage the insights gained from this study to design effective interventions. The Foodbank plays an important leadership role in the community in the fight against hunger. How to coordinate with other organizations and agencies to promote overall security in clients' lives could be a critical question to answer. If a comprehensive alliance could be formed, we might see the horizon of ending the hunger in this country.

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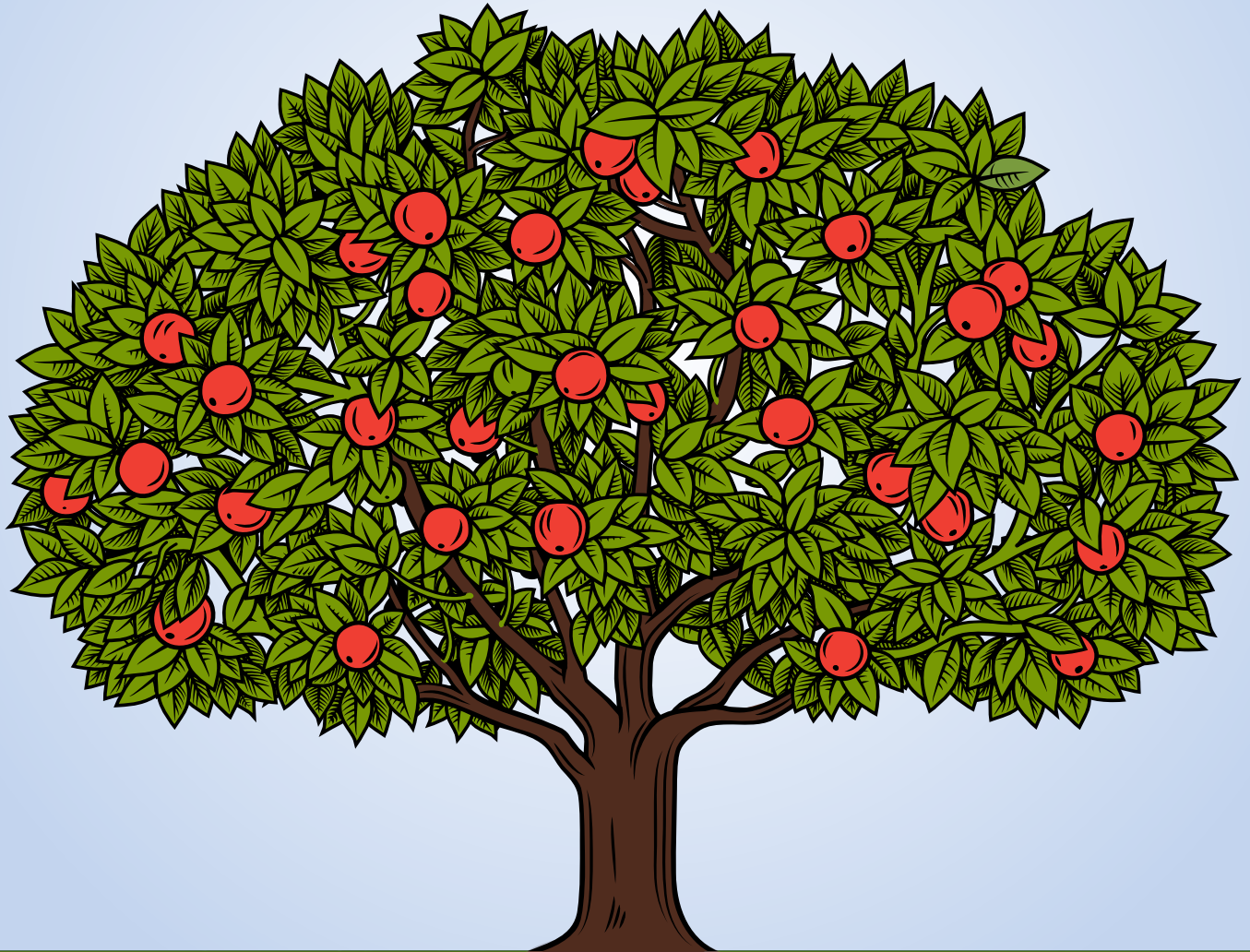
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The root causes of food insecurity



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