

A Community Assessment of Food Resources Available to  
College Students in the Dallas-Fort Worth Metroplex

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August, 2018

### Abstract

After exploring the limited research available on food insecurity among college students, the goal of this study was to add in-depth information on the resources available to college and university students in the Dallas-Fort Worth metroplex. This survey is an in-depth, qualitative interview with key informants in the student affairs departments at local colleges and universities to learn about: the demographics of institutions of higher education in the Dallas-Fort Worth Metroplex and the food resources campuses are providing to the students in need. Finally, the survey uncovered trends in addressing food insecurity among the colleges and universities who participated in the survey.

*Keywords:* qualitative survey, food insecurity, food resources, Dallas-Fort Worth Metroplex, college students, university students, institutions of higher education

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A student came into the office of Student Affairs at North Central Texas referred by her professor. As she entered, one could see the struggle she had been through on her face. It was clear that she was overwhelmed and exhausted. The student met with the Dean of Students to learn about services available to assist her and her family. During the meeting, she told the Dean that her family had “fallen down on their luck” and that the medical bills from her husband’s recent stroke were “piling up” (R. Del Rio, 05/24/2018, Personal Communication). The couple had been living in their car and had been struggling to obtain enough food to eat. She trying to balance: caring for her husband after he suffered a stroke, keeping up with school, and working to provide for her family. This story, like countless others, is an example of the life events that can lead a person or family to experience food insecurity.

To truly understand food insecurity among college students, it is critical to assess the context in the United States (US), in the state being studied, and among the population in question. As a population, college students are largely understudied. Specifically, research assessing poverty issues that impact both their well-being and academic performance is limited. The ramifications of the struggle to eat the necessary meals in a week will impact each person differently. The impact will be both physical and emotional. Research into food insecurity finds correlations between food insecurity and increased absenteeism among children and adolescents (Rampersaud, et. al., 2005) (Shanafelt, et. al., 2016) (Dunifon, Kowalski-Jones, 2017). In addition, it identifies a correlation between food insecurity and a decrease in cognitive and academic performance among children and adolescents (Rampersaud, et. al., 2005) (Shanafelt,

et. al., 2016) (Dunifon, Kowalski-Jones, 2017). These startling correlations are a compelling reason to ensure that students in need have the food resources they need to be successful.

The United States Department of Agriculture (USDA) defines food insecure households as “uncertain of having, or unable to acquire, enough food to meet the needs of all their members because they had insufficient money or other resources for food” and includes the categories of low food security and very low food security (USDA, 2014). As of the year 2015, 12.7% of households in the US were food insecure (USDA, 2015). Furthermore, the USDA breaks down data on food insecurity individually by state. In the state of Texas, the food insecurity rate by household is 14.3% (USDA, 2015). In North Texas, approximately 1 in every 6 individuals is struggling with food insecurity (Hunger Facts, 2018).

Levels of food security defined by the USDA include: high food security, marginal food secure, low food security, very low food security (Coleman-Jenson, Gregory, & Rabbitt, 2017). High food secure households report no issues accessing and affording food whereas marginally food secure homes may experience anxiety over affording food or a food shortage in the home (Coleman-Jenson, Gregory, Rabbitt, 2017). Households with low food security may reduce quality or variety of food intake without reducing the amount of food eaten. Households with very low food security are identified by the fact that members had to reduce food intake or change eating patterns due to the lack of available food resources (Coleman-Jenson, Gregory, Rabbitt, 2017). The Household Food Security Survey Module (HFSSM) and the Adult Food Security Survey Module (AFSSM) are the tools for food security assessment provided by the USDA.

Considering that 12.7% of households in the US are food insecure (USDA, 2015) it is important to understand the risk factors that may contribute to food insecurity, including: financial strain, poor maternal health, risky health behaviors, family conflict, or parenting disruptions (Gundersen, 2015). Furthermore, the cost associated with purchasing healthy food can contribute to food insecurity. The study found a “significant and positive association between higher diet costs and higher Health Eating Index scores” (Rehm, et. al., 2015, p 72).

The HFSSM and the AFSSM are short surveys created by the USDA to efficiently assess the food security situation faced by a household or adult (USDA, 2015). The length ranges from 6 to 18 items (USDA, 2015). The 6 question AFSSM ensures minimal response burden on the participants and improves comparability between single-person households verses households with children (USDA, 2015). A limitation to note is that the 6-item survey will not be able to assess the most severe levels of food insecurity in the same manner that the 18 question HFSSM is able to assess (USDA, 2015).

The survey includes questions about both being able to afford food and having enough food in the house. It also includes questions about whether there was anxiety about running out of food and the ability to get more food. Finally, it asks about whether the individual had to reduce the amount they ate so that the food would last throughout the month. These questions are asked on a scale to assess frequency of occurrence during the last 12 months. The questions have been adjusted over the years to ensure that each is easy to understand and answer. The definition and measurement tools of the USDA provide a foundation to understanding the food security situation in the US. Furthermore, the rates of food insecurity in the public in Texas and specifically North Texas also provide context for the rates of food insecurity among college students in DFW.

### **Literature Review**

In 2016, The College and University Food Bank Alliance partnered with the National Student Campaign Against Hunger and Homelessness, the Student Government Resource Center, and the Student Public Interest Groups to conduct a study of food and housing insecurity among college students across 34 campuses. There were 8 community colleges and 26 four-year colleges that participated in the study. The campuses were in 12 states across the US. Staff and volunteers conducted face-to-face interviews and surveys using a convenience sample between March to May of 2016. The group conducted 3,765 surveys (Dubick, et., al., 2016). The surveys included questions from the USDA's Adult Food Security Survey Module (AFSSM) to determine the student's food security status. The survey also included questions to assess the impact of food insecurity on students' education by asking students to self-report whether food insecurity had caused them to: miss a class, miss a study session, miss a club meeting, opt to not join an extracurricular activity, not buy a required textbook, drop a class, or not perform as well academically as they otherwise could have (Dubick, et., al., 2016). The survey found that "48 percent of respondents reported food insecurity in the previous 30 days, including 22 percent with very low levels of food security that qualify them as hungry" (Dubick, et., al., 2016, p. 7). These numbers prompt a need for further research into the issue of food insecurity among college students.

Research into food insecurity among college students in Illinois found a similar food insecurity rate of 35% (Morris, 2016). The 35% rate found among the students is significantly higher than the national average and the average for Illinois (Morris, 2016). High-risk populations who are disproportionately affected by food insecurity include: single-parent households, individuals living alone, black non-Hispanic households, Hispanic households, and

households living below the poverty line (Morris, et. al., 2016). These at-risk characteristics are representative of some of the college student population. This opportunity to assess for these at-risk characteristics to understand the reality of food insecurity among college students was unique to this study. This study revealed that the college student population may meet the criteria of an at-risk population due to the new financial burdens.

In a study of 209 college freshman living on the campus of a large public research university in the Mid-Atlantic, Bruening and colleagues (2016) found that 37% of respondents reported experiencing food insecurity in the previous three months. Despite the access to community resources, such as student meal plans, this study found that 37% of the freshman respondents living in campus residents' halls had reported struggling with food insecurity in the last three months (Bruening, et. al., 2016). The respondents also indicated higher rates of depression and diagnosed anxiety among those who had been food insecure in the past three months, the reports of anxiety and depression also being almost three times that of their food secure peers (Bruening, M., et. al., 2016). Despite access to "high quality housing; and university meal plans", these students are reporting inadequate access to food, at more than 2 times "the nation average for children and adults" (Bruening, M., et. al., 2016, p. 1453). This study demonstrated that research is necessary to understand the impact of food insecurity among college freshman, with special consideration encouraged for those living in residents' halls.

In 2014, a study conducted at a university in rural Oregon assessed food insecurity among students utilizing a 40-question survey and found that 59% of the students were struggling with food insecurity, which is approximately four times the national average of 15% (Patton-Lopez, 2014). The survey included the 6 question Adult Food Security Survey Module, a part of the Household Food Security Survey Module (USDA, 2015) (Patton-Lopez, 2014). In

this study, “students [who] reported working approximately 18 hours per week” were almost twice as likely to report experiencing food insecurity (Lopez-Patton, 2014, p 212). It is crucial to recognize that the rate of food insecurity found in this study is higher than the previous research into food security among college students, and it is unclear if this is due to the lack of a formal definition of food insecurity in this population. The inclusion of factors such as anxiety about where the student’s next meal will come from could influence the rate of food insecurity whether the student is actually missing meals.

In 2006, The University of Hawai’i at Manoa (UHM) did a survey of 445 students utilizing a stratified sampling method to ensure participation across the student classifications and disciplines. The survey used a portion of the US Household Food Security Survey Module (HFSSM), specifically the US Adult Food Security Survey Module (AFSSM), to assess food security among students. The six-question survey allowed for the food security of students to be assessed quickly and allow for students to complete it easily. The validity of the survey is established by the USDA as an accurate measurement tool for researchers. The prevalence of food insecurity among UHM students was “21% (n=85) with 15% (n=61) having low food security and 6% (n=24) very low food security” (Chaparro, M., 2009, p. 2099). The study found that 45% of students at the university were at risk of being food insecure and food insecure.

The issue of food insecurity among college students deals specifically with the population of food insecure young adults who may have minimal income, but may still be being claimed on the tax return of a parent. This status as an adult-dependent will impact the student’s opportunity to utilize government programs, like Supplemental Nutrition Assistance Program (SNAP), due to the strict income requirements (Supplemental Nutrition Assistance Program, 2018).

Additionally, the utilization of SNAP benefits requires transportation to get to case management

meetings, transportation to get to a super market to utilize the benefits, and an understanding of the income standards surrounding the SNAP program. Finally, college financial aid and student loan debt are also complicated factors that could impact the young adult's access to resources by restricting access to long-term assistance. Students who receive emergency meal plans or other emergency benefits from the school must be off those benefits within a 3-week period, or the benefits are deemed a scholarship and impact the student's financial aid (Heather Snow, Personal Communication, 2018).

The College and Food Bank Alliance, along with other national student organizations, strive to bring food resources on to the campuses where they are needed (Dubick, et., al., 2016). The opportunity for students to receive assistance on their campus instead of having to go off campus eliminates potential transportation and service barriers. It also ensures that the groups providing the assistance understand the complexities of these services for young adults who may be dependents or who must learn to navigate the complications of financial aid provided by the federal government.

### **Food Insecurity among School Aged Students**

Significantly more data is available related to food insecurity among children in the United States. Several federal assistance programs are available to families with children who struggle with food insecurity. Research into the effectiveness of these programs at relieving food insecurity is extensive. Programs available to families include: SNAP, Women, Infants, and Children (WIC), the National School Lunch Program (NSLP), and School Breakfast Program (SBP). These four programs have a national budget of almost \$100 billion (Gundersen, 2015). The SNAP and WIC programs provide families with assistance in being able to purchase food at

retailers across the US. The benefits a family is eligible for from SNAP is “directly proportional to family size and inversely proportional to income” (Gundersen, 2015, p 93). In addition to SNAP and WIC, millions of families in the United States qualify for the National School Lunch Program (NSLP). This program offers families the opportunity to have their children receive free or reduced cost lunches at their school during the school year. The program is accessible at more than 100,000 public and non-profit private schools (NSLP, 2017). The SBP is available at fewer school campuses across the US, 89,000 (SBP, 2017). However, students who qualify for the NSLP will also qualify for the SBP, if the program is available at the campus they attend. These programs form a safety net for families and children to attempt to stop food insecurity in the US.

The adverse effects of food insecurity on children and adolescents are driving factors behind the existence of SNAP, WIC, NSLP, and SBP. Food insecurity is found to correlate with: increased absenteeism, increased behavioral issues, and decreased cognitive and academic performance (Rampersaud, et. al., 2005) (Shanafelt, et. al., 2016) (Dunifon, Kowalski-Jones, 2017). Food insecure students are less likely than their food secure peers to report very good or excellent health (Shanafelt, et. al., 2016). Although mitigating factors, such as stress in the home, may also contribute to this outcome, it is noteworthy. Furthermore, food insecure students are less likely to play sports or participate in strenuous activity (Shanafelt, et. al., 2016). The lack of participation in school extracurricular and physical activity can be detrimental to the child’s socialization in the school environment. Simultaneously, the lack of family assets may encourage an adolescent to reach out to more community level assets (Shtasel-Gottlieb, et. al., 2015). Students who struggle with food insecurity were also more likely to have a “lower cumulative GPA” than their food secure classmates (Shanafelt, et. al., 2016, p 475). The

combination of these struggles may impede student success in the classroom(Dunifon, Kowalski-Jones, 2017).

The effectiveness of the safety net provided by SNAP, WIC, NSLP, and SBP is influenced by many factors. The qualification process for these services can be lengthy, including applications and interviews, and costly, including commuting to the local offices periodically to renew benefits, and potentially hiring a baby sitter for the children. For college students, the cost of travel and the lengthy applications, as well as the added burden of requiring appointments to be made within the context of a class schedule, would also restrict their ability to access and utilize food stamps. Simultaneously, the benefits of SNAP can be quite small, with some families only qualify for \$10 a month (Gundersen, 2015). The inverse relationship between income and SNAP benefits may explain why “households with incomes closer to the SNAP eligibility threshold are less likely to participate” (Gundersen, 2015, p 95). The issue of the income of a traditional college student is complicated because of the duality of being an adult while also being declared a dependent. If the parents of the student are still declaring them as a dependent no taxes, then this could impede the eligibility of the student receive services.

It is also important to consider that the stigma of receiving benefits may also impact enrollment and participation rates of WIC, SNAP, NSLP and SBP (Gundersen, C., 2015). When looking particularly at the NSLP and SBP, Shtasel-Gottlieb and colleagues (2015) found that “pride emerged as one such barrier” to obtaining resources ( p. 219). Feelings of embarrassment were common when adolescents attempted to get peer or community support in dealing with food insecurity (Stasel-Gottlibe, et. al., 2015). Simultaneously, the NSLP and SBP were found to be protective factors for students struggling with food insecurity (Stasel-Gottlibe, et. al., 2015). Finally, the study found that instability in the home impacted the participation in the

NSLP and SBP (Stasel-Gottlibe, et. al., 2015). Qualitative finding suggested that “school breakfast and lunch programs were key protective resources for students” (Stasel-Gottlibe, et. al., 2015, p. 220). These programs are the safety net established by the USDA to assist families struggling with food insecurity.

The assistance that children receive from the SBP and the NSLP are restricted to the school year, and to children who are old enough to be enrolled in school. These limitations exclude children younger than 5 years old, after school hours, and the summer months. That means that critical meals that children depend on for basic nutrition needs are not a resource that is always available to them.

Some of these issues with access are remedied at the community level through the provision of food at after school programs and summer food programs. These programs offer children bagged lunches during the summer months or back packs of food to take home. Furthermore, some of the programs will specifically provide for all the children in the home and not just the school aged children (Stasel-Gottlibe, et. al., 2015). These unique community programs offer additional safety nets for food insecure children. However, these provisions do not aid the adults in the household, or the college populations. These types of programs are restricted to minors.

### **Food Insecurity among Families and Adults**

The cost associated with purchasing healthy food must be considered when assessing food insecurity among families and adults. A study found that a diet that is higher on the Healthy Eating Index has a positive association with cost (Rhem, et. al., 2015). Lower income groups were found to make dietary decisions based on cost. It is important also to questions

whether the risk factors preceded the food insecurity or whether they became a contributing factor after food insecurity began. Studies have found that “cumulative financial strain is associated with non-poor households experiencing marginal food security” (Hernandez, 2015, pp 299).

Food insecurity creates a myriad of issues at every level, adults and families struggling with food insecurity are no exception. Food insecurity among children and students can cause decreased performance at school, increased absenteeism, and increased dropout rates (Heflin, et., al., 2015). In adults, it is important to recognize that food insecurity can reduce productivity rates, which may negatively impact employment (Heflin, C., et. al., 2015). Studies found that food insecurity “increases the risk of suicidal ideation, depression, and substance use, even when controlling the analysis for characteristics that make food insecure and nonfood insecure youth different” including indicators of socioeconomic status (Pyror, et. al., 2016, p. 1076). The financial stressors associated with food insecurity are detrimental to the mental health of young adults experiencing food insecurity.

Previous research increases the understanding of food insecurity among college students, although it may not be able to be generalized to the Dallas-Fort Worth Area, demonstrated an important need to assess the food resources available to college students in DFW. The research demonstrates that food insecurity on college campuses may range from 2 to 5 times more prevalence than in the general population. Furthermore, the additional burden of anxiety and mental health issues that correlate with food insecurity increases the need for further analysis of resources available to the students. Finally, the correlation with lower grades and reduced cognitive ability implores the engagement of institutes for higher education to facilitate access to these resources for struggling students. This study will attempt to gain understanding into and

assess the resources available to college students struggling with food insecurity in the Dallas-Fort Worth Metroplex (DFW) in the state of Texas.

## Method

The purpose of this study is to document existing services and support systems related to food insecurity that are accessible to students attending institutions of higher education in the Dallas-Fort Worth Metroplex. For the purpose of this study, the DFW Metroplex extends: north to include Denton County, east to include Dallas County, and west to include Tarrant County. Appendix I shows a map of the Metroplex with these boundaries defined. Thirty-three institutions were identified by utilizing Google Maps and the Google search engine to find community colleges, colleges, and universities in the DFW area.

As of the year 2015, 12.7% of households in the US were food insecure, 14.3% of household in Texas were food insecure, and 16.7% of North Texas households were food insecure (USDA, 2015) (Hunger Fact, 2018). The DFW Metroplex has 2 large food bank organizations, the North Texas Food Bank (NTFB) and the Tarrant Area Food Bank (TAFB). The NTFB serves 835,000 people in the 13 counties of service annually (Hunger Facts, 2018). In Tarrant county, the TAFB has confirmed that 1 in 6 people in their area of service are food insecure (Facts & Faces of Hunger, 2018). The TAFB serves 461,300 clients annually (Mills, et. al., 2014, pp. 2). It is important to note that both of these food pantries serve residents beyond the defined study area.

The total population of Texas as of 2016 is approximately 27 million people (Texas Demographics Data, 2018). Of those 27 million people, 14.6%, or approximately 4 million, of the individuals in Texas are in their 20s (Texas Demographic Data, 2018). Comparatively, 13.9% of individuals are in their 20s in the Dallas-Fort Worth Metroplex (Dallas, Texas Demographic Data, 2018). Understanding the demographics of the college-aged population in

Dallas-Fort Worth allowed the investigator to more adequately assess the current food insecurity situation among college students.

## **Measures**

The measure completed for this survey was a 29-question survey designed to assess the campus. It assessed: the campus demographics, the meal plan information for the campus, whether the campus tracks students who are struggling with food insecurity, the informant's experiences interacting with food insecure students, whether the university has an established protocol for aiding food insecure students, community partnerships, and campus resources (Appendix C). The survey took approximately 30 minutes to complete via a phone call or the online survey link.

## **Procedure**

A detailed flow chart of the study's protocol is included in Appendix H and outlines the progressive steps that were followed to collect data from each of the identified institutions. The principle investigators reached out initially via email and then with a telephone call to individuals in Student Affairs department or Dean of Student's Office at public universities, public community colleges, and private universities in the North Texas Metroplex.

Invitations to join this research were issued via email to four public community colleges that consist of 18 campuses. Additionally, six public universities and six private universities were contacted to participate (Appendix A). At each university, an individual in the student affairs, the Dean of Students Office, or student services department was invited to participate in the survey via email. The email included an invitation to join the study, the basic information the survey would collect, and an attachment that included the questions on the survey so that the

key informants had the opportunity to obtain information before the scheduled interview (Appendix D). Furthermore, it included a scheduling link to request a time for the phone call to collect the data. Finally, it encouraged the recipient to respond even if they are not the correct individual to contact, then the researcher requested another point of contact in the college or university who would be able to respond accurately and effectively. This allowed the survey to get to the best point of contact at each college or university.

If the researcher did not hear back from the contact via email, then the researcher followed up within 48 hours via phone. The first phone call resulted in either the completed survey or a prescribed message was left to request participation in the survey with the offer to schedule an appointment. If there was no response, then a second phone call was made the within the next couple days with the same protocol as the first phone call (Appendix E). Finally, a follow-up email was sent. This email included the link to the survey so that it can be completed online. The link was also being emailed to individuals who were willing to participate but could not complete a phone interview due to scheduling conflicts. The scripts used for each call are in Appendix E and F.

### **Data Collection**

Data collection occurred in June 2018. It consisted of a review of: phone interview recordings, detailed notes, and digital survey responses. The interviews were recorded, and detailed notes of answers were taken to develop a deeper understanding of the resources each campus is utilizing (Appendix B). Then all survey questions were reported and then assessed to understand potential themes that were consistent across multiple answers were noted as potential trends.

## **Results**

Thirty-three campuses were invited to participate in this qualitative survey on food resources that are available to college student across the DFW metroplex. A total of seven institutions participated in the survey. This is an overall response rate of 21%. These campuses are a mixture of two-year and four-year institutions, and a mixture of public and private institutions (Appendix B). The institutions range in size from 250 students to 58,000 students. Finally, the campuses have a mixture of responses in the resource the campus provides and the use of external community partners.

### **Institution Information**

The response rate can be broken down by the types of institutions that participated. Of the two-year public community colleges, 43% of the total institutions contacted participated in the survey. Of the two-year community colleges that responded, two are in Dallas county and the other is in Denton county. There were no respondents among the two-year community colleges to represent Tarrant County in the survey responses. Among both the private and public four-year institutions of higher education, 28.5% of the total institutions contacted participated in the survey. Of the four-year public universities that responded to the survey, both are in Tarrant County. No responses were received from public universities in Dallas or Denton counties. The private four-year institutions represented Dallas and Tarrant Counties, but none of the four-year private college respondents were from Denton county.

El Centro College and Richland College are both members of the Dallas County Community College District. El Centro College is composed of three campuses: El Centro College, El Centro West Campus, and El Centro College of Design. The Adult Program Service

Coordinator provided the information on El Centro College's response to students struggling with food insecurity. Richland College is another one of the seven campuses that are a part of the Dallas County Community College District. Richland College's Associate Director of Student Services responded to the survey to share the response that Richland College has for students struggling with food insecurity. The Dallas County Community College District, composed of seven campuses in Dallas, Texas, is made up of 25,000 students. The average age of the students is 26 years old. The racial breakdown of the district is: 34% Hispanic, 24% Anglo, 19% African American, and 16% Asian-American/Pacific Islander.

North Central Texas College's Dean of Student Affairs and Outreach responded to the survey. The North Central Texas College has its own system of 5 campuses in North Texas. The five campuses host 10,000 students in their higher education journey. Student age ranged from 18 to 21. The racial breakdown of the students attending North Central Texas College is: 24% Hispanic, 9% African American, and 46% Caucasian. The rest of the campus is identified as multi-racial.

Tarleton State University is a part of the Texas A&M System. Although Tarleton State University's main campus is not in the study area, one of the school's satellite campuses is located in Fort Worth. Similar to NCTC, services are not differentiated or restricted based on location. The Associate Dean of Students answered the survey. The total student body at Tarleton is between 8,500-9,000 students, who are of the traditional age ranging from 18 to 23. The majority of the student body is Caucasian, approximately 84%, and approximately 7% of the student body is Hispanic.

The University of Texas at Arlington is composed of 58,000 students. The Associate Vice President and Dean of Students responded to the survey. The University of Texas at Arlington is a part of the University of Texas System. The racial background of campus students is: 24.2% Hispanic, 15.8% African American, 9.6% Asian, and 10.9% International.

Southern Methodist University is a stand-alone campus with a student body of approximately 12,000. The Associate Dean of Student Support responded to the survey. The racial breakdown of the students at Southern Methodist University is: 11% Hispanic, 6% Asian, and 6% African American. The average student age is 20 for undergraduate students and 30 for graduate students. Finally, Dallas Christian College has a student body of 250 students. The Vice President for Student Development indicated that Dallas Christian College is a stand-alone entity. The student racial breakdown is: 17% Hispanic, 23% African American, 48% Caucasian, and 12% other.

Overall, the five public institutions of higher education are part of a large college or university network, and the two private institutions of higher education are standalone entities. All these institutions have students with a wide array of racial and ethnic backgrounds. The institutions that provided information on their student gender demographics have a fairly even split of men and women.

Only one of the two-year institutions of higher education offer an opportunity for students to live on campus, and students that want the opportunity to live on campus are restricted to one of the five campuses for the opportunity to have on-campus housing. Both public four-year universities offer on-campus housing. Finally, the two private institutions of higher education offer students the option to utilize on-campus housing.

The five four-year institutions of higher education all offer meal plans options for their students. Only one of the two-year community colleges offer a meal plan for students, and that meal plan is restricted to students attending the Gainesville campus. The meal plans vary from unlimited meal plan, only available at one of the private institutions, to a commuter meal plan that gives the student 10 meals per week.

### **Food Insecurity: Defining and Tracking**

Six of the seven institutions that participated in the survey had established definitions of food insecurity. Each campus is unique, therefore, the definition of food insecurity that the staff has established is unique to their student population. These differences, although beneficial for the individual campuses by giving the campuses the opportunity to serve more or fewer students as fit in the particular institutions, make assessing trends in food insecurity difficult for investigators.

El Centro College lacks a formal definition of food insecurity, and instead opts to give students the opportunity to self-declare as food insecure to receive resources (Appendix B). This campus reports that their staff served 40 students who struggle with food insecurity during the 2017 academic year. This number is an accurate representation of this campus, because the campus is actively utilizing a computer system to track the students on their campus who are struggling with food insecurity. North Central Texas College defines food insecurity among students as “students who are currently or in the future do not know where their food is going to be coming from” (R. Del Rio, 05/24/18, Personal Communication). This institution just began tracking food insecurity among their student body. They have found that approximately 15% of their students struggle with food insecurity. Finally, Richland College utilizes the Wisconsin

Hope Survey's definition of food insecurity: "food insecurity is the limited or uncertain availability of nutritionally adequate and safe foods, or the [inability] to acquire such food in a socially acceptable manner" (L. Thomas, 06/01/2018, Personal Communication). Richland College estimates that 43% of their students may be struggling with food insecurity based on this definition. This estimate is based off the results of the Wisconsin Hope Survey.

Tarleton State University does not have a formal definition of food insecurity (Appendix B). Instead, like one of the other two-year institutions, food insecurity was simply a student's need to access the food pantry. This lack of formal controls gives the students at this university an opportunity to receive resources when they feel it is necessary instead of restricting it to students who meet a formal list of criteria. This institution is not actively tracking the food insecure students. The University of Texas at Arlington also utilizes a self-declaration of food insecurity to qualify for the food pantry on the campus for the monthly food pantry (Appendix B). Depending on the severity of the food insecurity the student is struggling with, the campus provides resources accordingly. It is unknown if the University of Texas at Arlington is actively tracking food insecurity at this point in time.

Lastly, Dallas Christian Collage defines food insecurity among the students as, a "[student] who cannot afford or access enough food to live a healthy life" (M. Worley, 06/07/2018, Personal Communication). Despite this general definition, this school reported having no students who struggle with food insecurity. The institution also does not actively track food insecure students but believes that based on a "strong mentoring program" that connects students, staff, and faculty that the administration would be able to intervene (Appendix B).

### **Resources and Responses to Food Insecurity**

Each of the seven participating institutions have different responses to food insecurity because each institution is different, and the student population in each community is different. Questions that address resources addressed: the utilization of a resource sheet, the availability of an on-campus food pantry, and the availability of an emergency meal plan for students.

Four of the institutions that participated in the survey reported having a food resource sheet available to students who are struggling with food insecurity. These resource sheets assist students by providing information on local non-profits and community services that are available to these students. However, anecdotally, the key informants on a couple of the campuses shared that the resource sheets were not found to be as effective as the on-campus food pantry. This is reported to be connected to students feeling self-conscious about getting resources in the community. One key informant specifically encourages bringing the resources to the students to help them to understand that they are not alone in this struggle.

Of the seven institutions of higher education who participated in the survey, the three two-year community colleges and the two four-year public institutions of higher education reported having an on-campus food pantry for students struggling with food insecurity (Appendix B). The type of items available at the food pantries ranged from a snack pantry filled with snacks and small meals for students to full service food pantry with non-perishable and perishable items. The food pantry schedules varied from campus to campus, from 9:00AM-5:00PM Monday through Friday, to 3 days per week, to a once a month pop-up pantry for students. Of the private four-year institutions of higher education, one did not report if the campus had a food pantry and the other reported that they do not have an on-campus food pantry.

Lastly, the survey assessed access to emergency meal plans for students who are struggling with food insecurity. Only three of the seven schools surveyed reported having an emergency meal plan available to students who are dealing with food insecurity (Appendix B). Each of these three campuses handled access to the emergency meal plan differently. The two-year community college that offered an emergency meal plan has it available only at the campus where they have housing. It is available through the “Promise Scholarship”, which provides the student with a meal plan for a semester (R. Del Rio, 05/24/2018, Personal Communication). The public four-year university that offers an emergency meal plan for students in crisis offers the plan for three weeks. This limit ensures that the meal plan does not impact the student’s financial aid. It also gives the student time to seek long-term intervention. The private four-year college that offers an emergency meal plan through the Student Development Department to assist students by providing a meal plan scholarship and providing immediate relief through food resources.

## Discussion

This research indicates that the issue of food insecurity among the college student population requires more study to formulate a specific definition that meets the obstacles specific to college students, into resources available to students struggling with food insecurity, and into the resources are being provided to students and the differences in resources available at private versus public universities to gain a more accurate picture of the issue of food insecurity among college students. Food insecurity among college students would benefit from the utilization of a consistent definition to be able to consistently analyze and report the number of students on a campus struggling with food insecurity. A definition will also ensure that the reported rate of food insecurity reflects the same type and level of food insecurity even when looking at different campuses. This opportunity to define food insecurity as it pertains to students would assist in utilization of the resources available to students who are struggling with food insecurity. Food resources available to students include on-campus food pantries and emergency meal plans. The public four-year and two-year institutions of higher education provide these resources to the Dallas-Fort Worth students attending these universities.

This research into food resources among colleges in the Dallas-Fort Worth Metroplex identified several trends among the respondents of this survey. Primarily, it was identified that the public universities and colleges are active in engaging and aiding students who are struggling with food insecurity. These public institutions of higher education are providing on-campus resources to respond to food insecurity on the campus. On-campus resources providing food at each college do not currently have an established requirement for services offered. Those resources include a range from snack pantries to food pantries to emergency meal plans. Ideally,

these services would offer healthy foods including produce or grains to ensure that the students receive and can maintain a well-rounded diet.

None of the private institutions disclosed having an on-campus food pantry. The informants were notably less concerned about students struggling with food insecurity on their campus. The general belief appeared to be that it could not happen on that campus. However, one of the private colleges did report having a scholarship available to students that would be utilized to respond if a student is struggling with food insecurity. Future opportunities could include: establishing a consistent and reliable definition of food insecurity as it impacts college students, surveying students to understand the reality of food insecurity on college campuses and collaborating with food resource providers to assist in effective interventions to end food insecurity among college students.

### **Limitations**

Further study is needed to obtain a deeper understanding of the institutions of higher education in the Dallas-Fort Worth Metroplex, their response to food insecurity, and the resources available to struggling college students. Ideally, future research will include a larger sample size, perhaps a statewide study to understand food insecurity among college students in Texas. Furthermore, it would be beneficial to obtain a higher response rate that includes both schools with and without awareness of the issue of food insecurity. The response rate for the survey may have been impacted by the season because the research was conducted during the summer. Some campuses work with reduced staff during the summer. It could make obtaining a higher response rate more difficult. Therefore, a survey conducted during the normal academic semesters may yield more results.

It is important to note that biases of responses can occur because of the existence of social desirability, even among institutions like those in higher education. A fear of seeming ignorant to a student issue or concern of the institution appearing to not be caring for its students may lead some schools to not engage in a survey of this type. Meeting the specific needs of college students is complex. It is important to understand the context of college students' financial and social needs when trying to serve this population. College students are more likely to receive assistance when the assistance is available to them on their campus. Although, the key informants are active in the student community and have an understanding of the community and the resources, future surveys may offer more insight if conducted among the student body instead of utilizing key informants from the community. The opportunity for the students to identify their needs, their access, and their knowledge of community resource would share more in-depth information with researchers.

### **Research Implications**

Establishing a clear picture of food insecurity among college students is based in understanding and defining food insecurity among this population. The USDA's definition of food insecurity may not be accurate to the college experience of food insecurity. The definition of food insecurity on a college campus would also contain the issues specifically connected to the restrictions on a meal plan and the financial burden on students. Conducting qualitative and quantitative surveys on college students to establish and verify the reliability of a definition of food insecurity is crucial to providing an effective intervention. The current lack of a consistent definition means that each campus's reporting of food insecurity may be skewed differently, and therefore the current reports lack reliability. A survey of college students who meet this established definition of experiencing food insecurity could also be assessed across multiple

campuses to gain a better understanding of the reality of food insecurity in a geographic area, statewide, or even at the larger, national level. Further study could assess if students are aware of current campus food resources that are already established and would aid in understanding if these resources are being utilized effectively. It would identify gaps in services on the campus.

Analyzing available resources on campuses through the use of program evaluations, satisfaction surveys, and comparing snap shots of changes in overall grade point averages or graduation rates to understand if the resources are truly reducing food insecurity would allow campuses to engage in more efficient interventions and establish effective interventions. This could be done utilizing currently operational food resources or by establishing new resources and tracking the information on a campus that is not currently providing assistance to its students. This analysis would also assist in ensuring universities wisely invested in interventions that are most effective at reducing or eliminating food insecurity among the students.

Engaging with community resource providers would also give the opportunity to establish a unique understanding of the resources in the community and the experiences of these agencies with food insecure college students. Additionally, engagement with the community resources may be beneficial for the students and the community to understand the resources available to students. Engagement with resource providers will allow for in-depth knowledge on availability and would offer an additional perspective on food insecurity among college students. This opportunity to partner with more resources will provide more detailed and in-depth data for analysis to understand the reality of food insecurity among college students. This will establish if there is an opportunity to fill in gaps in service that are already available in the community. It may also assist in reducing the financial burden of intervention from campuses.

Finally, additional research is needed to understand the implications of food security research as it pertains to private universities. Ideally, access to assess and understand the mechanics of food insecurity potential experienced by students at these universities may alert researchers to different types of interventions that may be effective among this group of students. Additionally, the lack of resources available on these campuses may signal a greater need for research to ensure that students are in fact food secure.

### **Policy Implications**

Universities and colleges can identify and set a consistent definition for food insecurity among the college student population to allow for consistent research and understanding of the reality of food insecurity among students. The established definition may differ from the definition from the USDA to account for the students who are served by the on-campus meal plans, but are not able to eat during the prescribed meal times or who do not have enough meals in a week to provide a healthy diet. It could include questions about the meal plan they receive and the number of meals the student is able to consume per week. It could additionally establish parameters for access to healthy food on campuses. This definition could be an addition to the university's financial aid applications, scholarship, or to ensure equal access to resources.

After a definition of food insecurity is established among the higher education community, and then there would be a unique opportunity to require the establishment of resources for students. There may be a respective set of requirements for on-campus food pantries, and the supplies they provide to include fresh produce or grains. A policy could also regulate the hours or days of operation of an on-campus food bank to assist students. Adjustments could be made to federal programs such as SNAP to allow college students access

to these food resources despite or even because they are dependent on their family for financial support.

Finally, there is an opportunity to establish a consistent definition for eligibility to receive an emergency meal plan on the campus. This would allow struggling students to understand the requirements and aid campus administrators in distributing these resources. It could also include policies that adjust cafeteria or class hours to ensure that students are able to utilize the meal plan on campus as it was designed. New policies could even be added to establish a program similar to the NSLP by providing free meal plans or meals to qualifying students. This would ensure that students are getting the required healthy food for their academic success through the college they are attending.

Once these policies and definitions are established, it is critical to require staff training and understanding of both the definition of food insecurity and to gain an understanding of how to screen students to assess for food insecurity. This training could include ways for staff, faculty, and administrators to recognize the signs of food insecurity in the classroom and on campus. Training could also include ways to engage with a student about resources in an appropriate manner.

### **Practice Implications**

As social workers, advocacy for the 22-59% of food insecure students who are on campuses across the state of Texas is a vital part of service to the community and human rights (Dubick, et., al., 2016) (Patton-Lopez, 2014). The impact of food insecurity on the social work community stems directly from the Code of Ethics through the fight for social justice. It is

critical to advocate for populations who are struggling with access to a basic human need like food.

Advocacy opportunities may include reducing financial burdens on college students through an increase in financial aid or a decrease in the cost of higher education. Additionally, advocating for more on-campus resources will expand the safety net for students struggling with food insecurity by ensuring that resources are available to these students. Utilizing the community's opportunity as workers in non-profits to engage with local campuses and bring the agency resources to campus to eliminate food insecurity among college students.

It is important for social workers in all capacities of college campuses to strive to identify and link students who are struggling with resources in the community. This comes from engaging with students and looking beyond the social workers respective position to make sure to assist in maintaining the health of the whole student.

### **Conclusion**

Due to the minimal research that has been conducted to assess food insecurity among college students, this study could be utilized as a pilot type study in assessing food resources available to college students attending college. A major key to understanding the trends and realities of food insecurity would include replicating this study to assess the reliability of the questions and feedback. Additionally, a goal for a future study might include obtaining a larger sample size, additional counties in the Dallas-Fort Worth Metroplex, or surveying schools in similarly metropolitan areas. These small changes would address some of the limitations of this study. Additionally, expanding the network of key informants to include nonprofit agencies serving the individuals struggling with food insecurity or assessing student access to government

assistance that is available to eliminate food insecurity would provide additional insight into the food resources available to students. Assessing the duality of students as dependents of their parents and the financial aid system that can disqualify students in receiving services is also critical. Attempting to gain a deeper understanding of each of these factors will allow for additional clarity in the reality of food insecurity among college students and the resources available to address this issue.

Ideally, future studies will survey the students on campuses to: establish a functional definition of food insecurity, provide a baseline for the number of food insecure students, to assess the student's awareness of available resources, to establish more resources, and finally to evaluate the effectiveness of resources available to students. The functional definition of food insecurity would address concerns that specifically relate to food access as a college student such as: dining hall hours, dietary restrictions, costs associated with meal plans, timeliness of financial aid, and other additional factors specific to students. Utilizing a consistent definition, a study could analyze food insecurity on multiple campuses and obtain a reliable rate of food insecurity. Assessing student awareness and evaluating available programs will allow for researchers to gain a realistic understanding of students' knowledge of services and the effectiveness of the services. This could include impact of services on students' health, well-being, and academic performance.

Addressing these limitations and looking for new opportunities to address food insecurity at the collegiate level will create a holistic view of: the prevalence of food insecurity among college students, the response to food insecurity on college campuses, and evaluating current and potential solutions to food insecurity. Through replication of the study and addressing the limitations in this study, the information will allow for more research overall, and increase the

reliability of data regarding food insecurity. Finally, research could expand opportunities to address food insecurity by assessing the reality of food insecurity, establishing resources, and evaluating potential solutions to food insecurity while keeping in mind the goal of student success.

### Appendix A

College Spreadsheet for Thesis 2018		
Public Community Colleges	Public Four-Year University	Private Four-Year University
North Lake College	University of Texas at Arlington	Texas Christian University
North Lake College West Campus	North Texas University	Southern Methodist University
North Lake College North Campus	University of Texas at Dallas	Texas Women's University
Mountain View College	Argosy University	Dallas Christian College
El Centro College	University of North Texas at Dallas - College of Law	Texas Wesleyan University
Richland College	Tarleton State University	Dallas Baptist University
Cedar Valley College	Amberton University	Concordia University
El Centro College - West Campus		
Eastfield College		
El Centro College for Design		
Brookhaven College		
Tarrant County College - Southeast Campus		
Tarrant County College - Northeast Campus		
Tarrant County College - South Campus		
Tarrant County College Trinity River Campus		
Tarrant County College - Northwest Campus		
Tarrant County College - Crowley South Campus Center		
Tarrant County College - Haltom City Northeast Center		
North Central Texas College		

### Appendix B

Survey Results Breakdown				
Public Community Colleges	Definition of Food Insecurity?	Tracking Food Insecure Students	Food Pantry Available on the Campus	Emergency Meal Plan Available on Campus
El Centro College, El Centro-West Campus, and El Centro College for Design	Any student who self-reports that they're in need of food are identified as food insecure at El Centro	Utilizes a computer system to track students who request food	Yes	No
Richland College	Food insecurity is the limited or uncertain availability of nutritionally adequate and safe foods, or the ability to acquire such foods in a socially acceptable manner	Not currently tracking	Yes	No
North Central Texas College	Students who are currently or in the future do not know where their food is going to be coming from	Recently began tracking students struggling with food insecurity, but there is currently no data available	"Snack" Pantry Available	Yes, but only at one campus
University of Texas at Arlington	No reported definition	Not reported	Yes	Yes
Tarleton State University	Any student in need of access to the food pantry is defined as food insecure	Not currently tracking	Yes	Yes
Southern Methodist University	No reported	Not reported	Not reported	Not reported
Dallas Christian College	Students who cannot afford or access enough food to live a healthy life	Not currently tracking	No	No

## Appendix C

### Questionnaire

1. Name:
2. Email:
3. Phone:
4. Job Title:
5. Department:

### Campus Demographics:

6. Is your campus a part of a larger institution of higher education or a stand-alone entity?
7. What is the total number of students enrolled at this campus?
8. What is the average age of the students enrolled at this campus?
9. What are the racial and ethnic backgrounds of the students?
10. What are the demographics for gender on this campus?
11. How many students live on this campus?
12. How many students are commuters to this campus?
13. What percentage of the students on this campus are Pell Grant recipients?
14. Describe the meal plan options available to students.

### Questions on food insecurity on the campus:

15. Describe how this campus defines food insecurity.
16. Describe the number of students on this campus who struggle with food insecurity.
17. How does the campus track food insecure students?
18. Can you describe an experience working with a student facing food insecurity?
19. In an average semester, how many students do you come into contact with who are food insecure?
20. What is the protocol in place for responding to students who are struggling with food insecurity?
21. Which individuals on campus are trained on the protocol for assisting food insecure students?
22. Does this institution have a resource sheet available for students who are struggling with food insecurity?
23. Does this institution currently have a referral network for students struggling with food insecurity?
24. Does this institution have an on-campus food pantry for students?
25. If the campus has an on-campus food pantry, does it provide fresh produce to the recipients?
26. If this campus has an on-campus food pantry, how often is it available to students?
27. Does this campus have an emergency meal plan available for food insecure students?
28. If the campus has an emergency food plan available to students, what are the parameters for receiving this assistance?
29. Is there anyone else on this campus I should reach out to for additional information about this issue? Please include: name, department, phone number, and email address.

## **Appendix D**

### **Invitation Email**

Dear [insert contact's name here],

My name is Katelyn Pearson. I am a Master of Social Work Student at the University of Texas at Arlington. I'm reaching out to you to invite you to participate in a survey of local colleges and universities in the Dallas-Fort Worth Metroplex as a part of my thesis project.

The survey is approximately 29 questions, and will assess: campus demographics, your experiences with food insecure students, and resources available to food insecure students. I would appreciate the opportunity to schedule a time to call you. The interview should take approximately 30 minutes of your time.

Please follow the attached link and select a time when you're available. I look forward to speaking with you soon.

<https://doodle.com/poll/65m9qhnu68nzmmyc>

If you are not the correct person to contact in order to obtain this information, then please share with me the information of the correct individual and I will reach out to them.

Truly,

Katelyn Pearson  
UTA MSW Student  
[Katelyn.pearson@mavs.uta.edu](mailto:Katelyn.pearson@mavs.uta.edu)  
214-223-9057

## Appendix E

### Phone Call/Voicemail Scripts

#### Script for Phone Call 1:

Hello, my name is Katelyn. I am a Master Social Work Student at the University of Texas at Arlington. I'm reaching out to you to assess your [university/college]'s ability to respond if a student self-declares as food insecure. Do you have the time to speak with me today? Or could we schedule an appointment to speak? The interview takes approximately 30 minutes.

#### Script for Voicemail 1:

Hello, my name is Katelyn. I am a Master Social Work Student at the University of Texas at Arlington. I'm reaching out to you to assess your [university/college]'s ability to respond if a student self-declares as food insecure. If you're willing to participate, please give me a call back at 214-223-9057 or email me at [katelyn.pearson@mavs.uta.edu](mailto:katelyn.pearson@mavs.uta.edu) to schedule an interview.

Please don't hesitate to let me know if I have reached the wrong person for this type of inquiry.

#### Script for Phone Call:

Hello, my name is Katelyn. I am a Master Social Work Student at the University of Texas at Arlington. I'm reaching out to you to assess your [university/college]'s ability to respond if a student self-declares as food insecure. Do you have the time to speak with me today? Or could we schedule an appointment to speak? The interview takes approximately 30 minutes.

#### Script for Voicemail 2:

Hello, my name is Katelyn. I am calling to follow up with you today. I am a Master Social Work Student at the University of Texas at Arlington. I'm reaching out to you to assess your [university/college]'s ability to respond if a student self-declares as food insecure. If you're willing to participate, please give me a call back at 214-223-9057 or email me at [katelyn.pearson@mavs.uta.edu](mailto:katelyn.pearson@mavs.uta.edu) to schedule an interview.

Please don't hesitate to let me know if I have reached the wrong person for this type of inquiry.

## **Appendix F**

### **Follow-Up Email**

Dear [insert contact's name here],

My name is Katelyn Pearson. I am a Masters of Social Work student at the University of Texas at Arlington. I'm reaching out to you to invite you to participate in a survey of local colleges and universities in the Dallas-Fort Worth Metroplex as a part of my thesis project.

Please follow the link below to complete the survey. If you're willing, please complete it no later than June 8th, 2018.

[https://uta.qualtrics.com/jfe/form/SV\\_d3SmDHuMezAix5r](https://uta.qualtrics.com/jfe/form/SV_d3SmDHuMezAix5r)

If you are not the correct person to contact in order to obtain this information, then please share with me the information of the correct individual and I will reach out to them.

Truly,

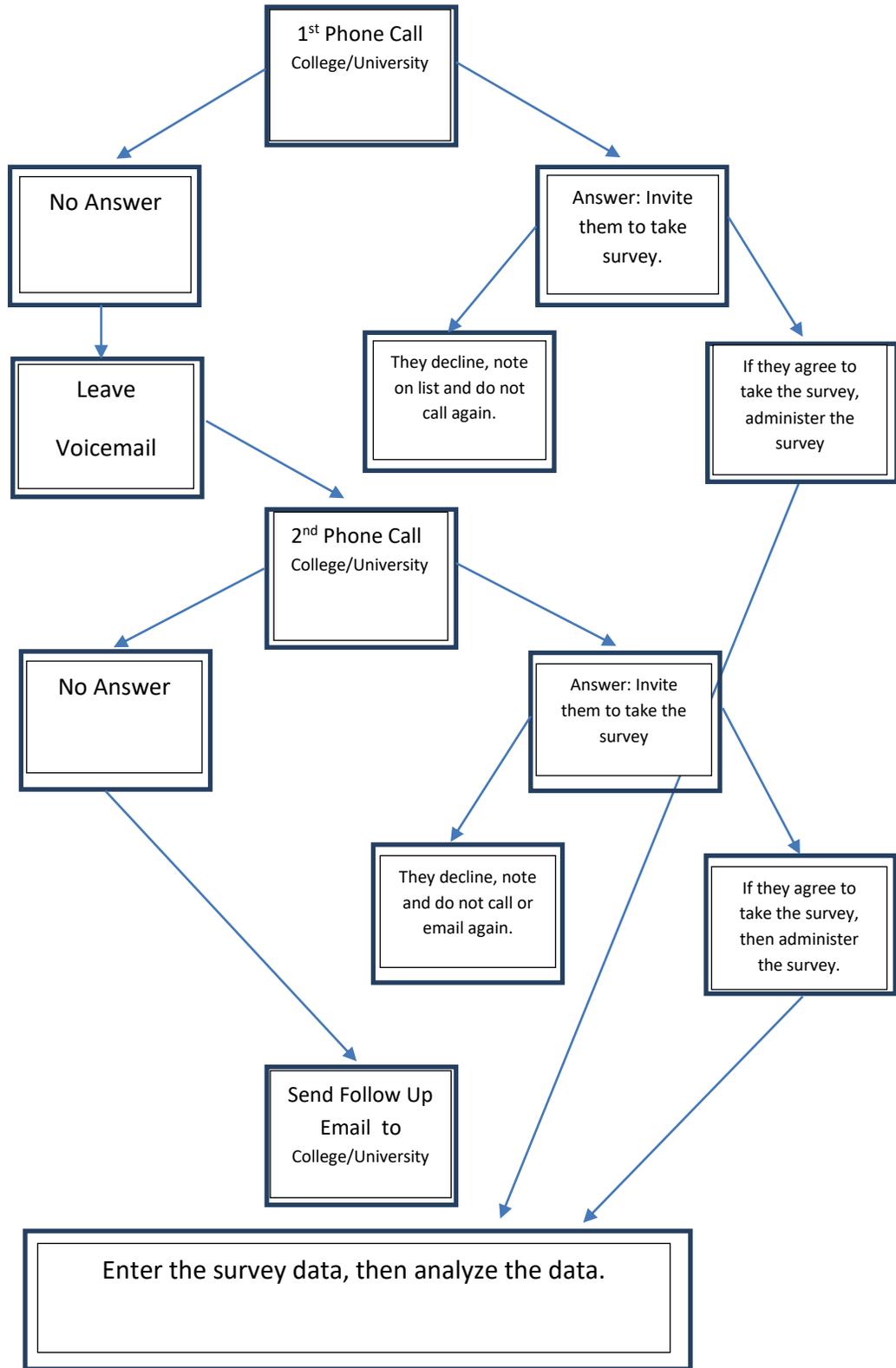
Katelyn Pearson

UTA MSW Student

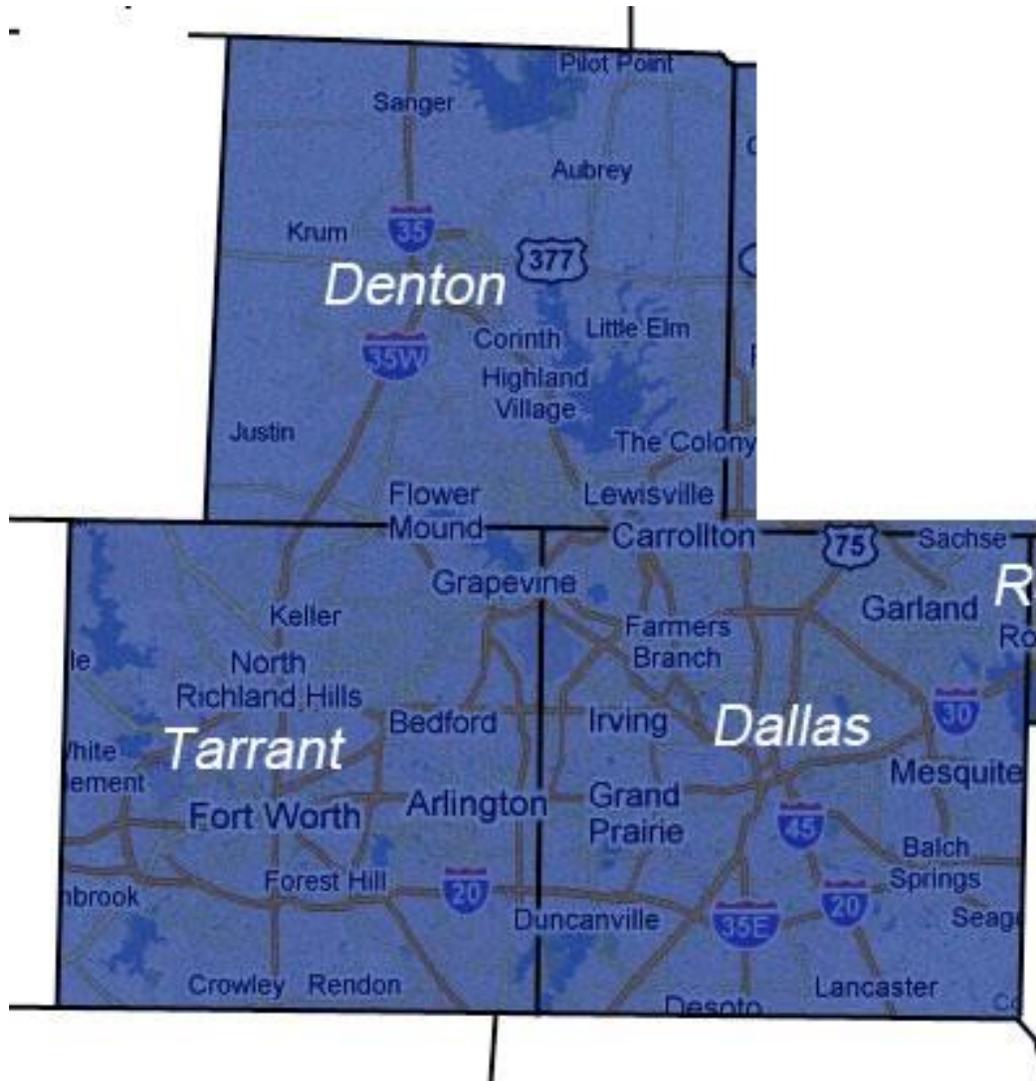
[Katelyn.pearson@mavs.uta.edu](mailto:Katelyn.pearson@mavs.uta.edu)

214-223-9057

### Appendix G Study Procedures Flow Chart



**Appendix H**  
**DFW Area Map**



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