Project Summary

Student:
Mentor:

Institution: Board of Trustees, University of Arkansas

Student Classification: Junior Student GPA:

Area of Study: Agricultural Business (Economics Concentration)

Title of Project: Impact Performance Efficiency of Hunger Relief Programs and Food Donation

Partners in Northwest Arkansas

Since 1990, the number of families below the poverty line in Washington County, Arkansas has increased by 10% (Fitzpatrick et al., 2008). Today, Arkansas ranks first in food insecurity and 57% of students in Northwest Arkansas (NWA) qualify for free or reduced school meal programs (NWA Food Bank, 2013). There is a growing need in NWA for local hunger relief programs with a high community impact. To help fulfill this need, these programs will require assistance from food donation partners. In NWA, some programs and partners have been serving the community for decades, while newer programs are still trying to identify how to best reduce food insecurity in the area. In many cases, hunger relief programs do not have the staffing resources to track performance measurements and the efficiency of contributions from donation partners. Without these measurements, future management can be blinded on how to provide for the rising food insecurity rates in NWA, and consequently those who are food insecure may continue to suffer.

This SURF project focuses on the second part of a long-term study with the overarching goal to identify, evaluate and share with organizations, donors and the community at large, performance measures of hunger relief programs and donation partners in NWA. The specific goal of this SURF study is to work in NWA with both hunger relief programs and their donation partners to: 1) identify a set of program performance measures that are related to the donations of their partners and 2) assess the impact that these partners have assisting hunger relief programs to make NWA more food secure. This SURF research will use data collected through a survey of the programs and their partners to solicit the performance measurements related to their hunger relief efforts. Collected data sets related to identified performance measures will be analyzed for efficiency (for example: costs-per-meal, cost-per-person-served, percentage of time organization met its meal goal) and other identified program goals. "What if' scenarios will be generated to see how changes in food donations from partners (either in quantity of food, type of food, or timing of food delivery) could have impacted the performance of programs.

Results of this study are expected to identify a set of performance measures and provide assessments thereof relevant to hunger relief programs and donation partners in NWA. This information can help improve the impact of hunger relief programs and increase the efficiency of their donation partners in order to help meet the hunger relief needs in NWA.

Fitzpatrick, Kevin M., Myrstol, Brad A., and Miller, Elizabeth. (2008). Northwest Arkansas Community Indicators: A quality-of-life assessment. Rogers, AR: The RoArk Group.

NWA Food Bank. (2013). "About the NWA Food Bank." Feeding America. Accessed March 18, 2013. Retrieved from http://www.nwafoodbank.org/#!about/clxqy.

Impact Performance and Efficiency of Hunger Relief Programs and Food Donation Partners in

Northwest Arkansas

Introduction and Background Literature

The Economic Research Service (ERS) defines food security as "access by all people at all times to enough food for an active, healthy life" (USDA, 2013). A recent report by the ERS showed nearly 16% of all US households with children were food insecure at one point during the year (Nord, 2009). Arkansas ranks first in the nation in food insecurity (Lilley, 2013). Although known for economic prosperity, Northwest Arkansas (NWA) household income levels have decreased since 1990 with Washington County alone seeing a 10% decrease in resident making a living wage (Fitzpatrick, et al., 2008). In NWA, 57% of students qualify for free and reduced meal programs (NWA Food Bank, 2013). As the number of people earning an income above the poverty level declines, the need for nonprofit food aid increases.

In response, there has been an increase in non-profit organizations taking active roles in hunger relief programs. Different models (cash, food and vouchers) for hunger relief have been disputed over time. Programs that provide direct relief (either through meals or raw produce) have been criticized as economically inefficient with high implementation costs relative to other relief models (Hidrobo, et al., 2012; Gentilini, 2007).

Despite this inefficiency, many programs in NWA include providing direct hunger relief in their mission statements (Rousseau, 2007; Shah, 2007). New donation partners who help to provide food for these programs are emerging as well. For example, a few years ago The Cobblestone Project developed a donation partner, *The Farm*, which has provided thousands of pounds of food to hunger relief programs in NWA. Both hunger

relief programs and donation partners lack staffing resources to assess the impact of their donations to programs (Graves, 2013) (Cobblestone Project, 2013).

Purpose, Need, and Objectives

As food insecurity grows in NWA, so does the need for efficient hunger relief programs and donation partners. Performance measurements are essential to guide future management strategies to increase efficiency of both programs and partners (Cunningham and Ricks 2004; Bryson, 2013). Studies on the use of performance measurements by non-profits suggest that, due to varying goals, a financial assessment alone may not measure the performance of non-profit organizations (Forbes, 1998; Garcia, Gonzalez and Acebron, 2013; Kaplan, 2003; Sharp and Brock, 2010; Zimmerman and Stevens, 2006).

This SURF project focuses on the second part of a long-term study with the overarching goal to identify, evaluate and share with organizations, donors and the community at large, performance measures of hunger relief programs and donation partners in NWA. The specific goal of part two of this long-term research project is to work in NWA with both programs and partners to: 1) identify a set of hunger relief program performance measures related to contributions of donor organizations and 2) assess, using these identified performance measures, the impact that food donation partners have on the ability of hunger relief programs to meet their goals.

Methods and Materials

While this SURF grant focuses on part-two of the study, methods used for part one are also explained, connecting parts one and two of this study.

During part-one, a survey was developed for hunger relief programs matching the methods of Salant and Dillman (1994). This survey was pretested by community volunteers, revised and submitted for approval from the University of Arkansas Institutional Review Board (IRB). This first survey is comprised of 11 questions that solicit information regarding programs' missions, constituencies served, how programs distribute food and how programs use performance measurements relative to their hunger relief efforts. Upon receipt of IRB approval, contacts at 12 hunger relief programs were identified to survey (Samaritan Center, NWA Women's Shelter, LifeSource, St. Paul's Episcopal Church, Cross Church, Central United Methodist Church, Feed Fayetteville, Owl Creek School, Restoration Village, Farm to School, Bella Vista Lutheran Food Pantry, Full Circle Food Pantry and Farm Box Delivers). Surveys were distributed by email. To date, four surveys have been completed and returned with remaining surveys due November 26, 2013.

Second, a literature review is being conducted to identify performance measures used by non-profits across the nation. Included in this search are government (particularly USDA) studies, studies by large hunger relief organizations (Feeding America, UN World Food Programme, Meals on Wheels, etc.) and published literature (in journals such as Non Profit Management and Leadership, Journal of Agricultural and Applied Economics, International Review on Public and Nonprofit Marketing, Food Aid Review, and International Journal of Voluntary and Nonprofit Organization, etc.). Performance measures cited so far include: 1) cost per meal, 2) the number of hours volunteered, 3) number of meals/snacks/individuals served, and 4) number of elderly and children served. Other performance measures are expected to emerge.

Finally, upon receipt of all surveys, responses will be summarized and used to develop profiles for each hunger relief program. Performance measures used by the local hunger relief programs will be compiled and compared to measurements found during the literature review.

Part-two, the focus of this SURF Grant, will begin in January, 2014. A second survey will be developed, again following the methods of Salant and Dillman (1994) and Dillman (2007). This survey will collect data for 2013 from each hunger relief program regarding: 1) the identified performance measures (if known), 2) an explanation if these data sets were not collected by a hunger relief program (not relevant, too time consuming or costly, etc.) 3) amount of food received from donation partners (such as from *The Farm*, in 2013) and 4) the relationship between these performance measures and their donation partner's efforts (how does timing of food received enable the hunger relief program to achieve its goals).

Second, collected data will be placed in an Excel spreadsheet to analyze determined efficiency measurements (eg. costs per meal, cost per person served, percentage of time organization met its meal goal). "What if' scenarios will be generated to see how changes in food donations - either in quantity of food, type of food, or timing of food delivery - could impact performances of hunger relief programs. Results will be shared with all participants in a final report. Specific performance of any given organization will only be shared with that organization. The final report will aggregate results, summarize performance of hunger relief programs, and suggest how donation changes may impact program efforts in NWA.

Expected Results

Results of this study are expected to identify a set of performance measurements that are relevant to impact and efficiency performance of hunger relief programs in NWA that can be

understood by donation partners. Results will also include a summary of the performance of those hunger relief programs in 2013. Finally and most importantly, the analysis will show how changes in donation partners' efforts (with respect to timing of food delivery, type of food delivery and quantity of food delivery) can impact performance of hunger relief programs. This information can help both hunger relief programs and donation partners to improve impact and efficiency performance of hunger relief in NWA.

Preliminary Research Timeline (Part-One)

- July November, 2013: Develop and distribute preliminary survey identifying the hunger relief programs' missions, the constituencies served, how the programs distribute food, and if, which and how the programs are currently using performance measurements related to their hunger relief efforts.
- October December, 2013: Conduct a thorough review of the literature to identify performance measures being used by non-profits across the nation.

December, 2013: Develop profiles for hunger relief programs.

Timeline (Part-Two)

- January-May, 2014: Develop and distribute to hunger relief programs a survey aimed to:
 - 1) identify performance measures, 2) ask for a reason if these data are not collected by this particular hunger relief program, 3) determine the amount of food received from donation partners, and 4) determine the relationship between these performance measures and their donation partner's efforts.
- August-November, 2014: Analyze data from second survey for performance measures including costs per meal, cost per person served, percentage of time organization met its meal goal. Prepare final report.
- December, 2014: Distribute final report to hunger relief programs and donation partners.

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