



Crossroads Community Services (Crossroads), in partnership with the Community Assistance Research (CARE) Initiative

Improving Access to Food for Food Bank Clients

About Crossroads and CARE

Crossroads Community Services is a nonprofit that nourishes low-income families by providing healthy food and supportive education in Dallas, Texas. In 2017, Crossroads distributed 2,324,370 pounds of food to 11,056 unique individuals, which includes 4,080 children aged 17 years and younger. This translates to 1,936,975 meals and a market value savings to clients of \$4,648,740 million. Crossroads is a proud member of the North Texas Food Bank feeding network.

CARE researchers collaborate with Crossroads to evaluate the effectiveness of programs, assess the food and health needs of low-income populations, especially their levels of food insecurity, and then develops innovative interventions and solutions. The CARE research team is interdisciplinary and comprises faculty, staff, and students from University of North Texas, University of Texas Southwestern Medical Center, and University of Dallas.

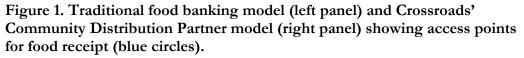
Food Insecurity is a Problem across the U.S., particularly in Dallas

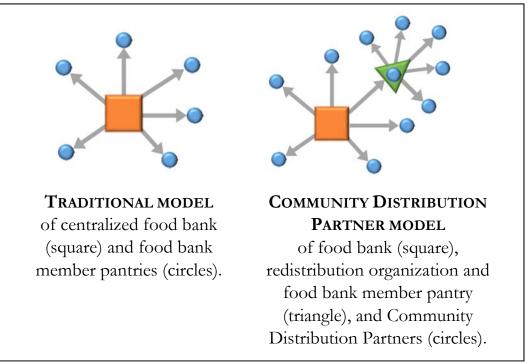
Dallas County is flourishing economically, yet the overall rate of food insecurity continues to be approximately five percentage points higher than the national average (17.6% vs. 12.9% in 2016). Children in Dallas suffer disproportionately from food insecurity. The percent of children in Dallas who are food insecure is higher than the national average (23.3% vs. 17.5% in 2016). [1]

How can Food Distributors Increase Access to Food?

The traditional food banking model in Dallas and across the U.S. is hierarchical and distributes food from a single central location, the food bank, to member pantries, which in turn provide food directly to clients *(left panel, Figure 1)*. The number of member pantries is limited by the number of entities the food bank can efficiently serve and the capacity of organizations to meet the legal requirements related to food storage and handling. Clients need to secure transportation to a member pantry, often many miles from their home, to pick up food. When transporting large quantities of food, a private vehicle is preferable. However, many food insecure families do not own a vehicle. In large counties like Dallas, which is 880 square miles, this means that the nearest member pantry may be located many miles away from the micro-pockets of poverty in which many food insecure populations reside.

To better meet the needs of families experiencing food insecurity in Dallas County and other large urban counties, innovative solutions are needed. The preliminary evidence presented here highlights how changes to existing models of food-redistribution can improve access to food for residents of multiple, diverse neighborhoods.





Building and Evaluating a Novel Model of Food Re-Distribution to Improve Food Access

In 2006, Crossroads began implementation of the *Community Distribution Partner (CDP) model* of food re-distribution. Crossroads designed the CDP model to improve access to food assistance in Dallas County and to extend its reach beyond the four walls of its pantry. In the CDP model *(right panel, Figure 1)*, Crossroads continues to provide food through its food bank member pantry and redistributes food to other organizations—essentially functioning as a mini-food bank for a network of community-based sites throughout Dallas County. This tiered distribution system allows Crossroads to provide nutritious groceries to more people living within micro-pockets of poverty and food insecurity across a large geographic area. CDPs have fewer safe food handling requirements as compared to food bank member pantries. For example, member pantries need commercial grade freezers and coolers, to store food indefinitely. CDPs distribute food once a month to their clients and the distribution occurs within hours of receipt of the food from Crossroads. Consequently, they only store relatively small amounts of frozen or refrigerated product when households are unable to picked up their food packages; they are only allowed to hold this product for 48 hours; after 48 hours, it must be distributed. Thus, CDPs operate differently than food bank member pantries have food in storage, they can serve "walk-in" clients. In contrast, CDPs pre-enroll clients and pre-scheduled pick-up times during which all clients must come and receive food. Typical pick-up times at CDPs occur once a month and last for 1-2 hours.

Community Distribution Partners Improve Access to Food

CARE, in collaboration with Crossroads, is evaluating the reach and impact of the CDP Model. In the ongoing evaluation funded by *Robert Wood Johnson Foundation*, the research team is comparing outcomes of clients receiving food at CDPs to those receiving food at the centralized redistribution center's pantry in downtown Dallas. Emerging findings presented here demonstrate benefits of the CDP model.

Community Distribution Partner (CDP) sites are located closer to communities in need, thus improving access to food assistance. *Table 1* shows that CDPs improve access to food. On average, clients of CDPs travel 1.6 miles (3.4 minutes) to pick up food, compared to clients of the food bank member pantry located who travel 7.8 miles (12.6 minutes). Shorter distance and quicker travel time likely play a major role in improving regular receipt of food among clients. Greater utilization at CDPs is notable, given that the smaller size of CDPs may present additional barriers for clients. For example, compared to the member pantry, which is open 4 days a week, most CDPs are only open 1 day a month (*Table 2*).

	FOOD BANK MEMBER PANTRY	COMMUNITY DISTRIBUTION PARTNER
MEAN DISTANCE FROM CLIENT HOME (MILES)	7.8	1.6
MEAN TRAVEL TIME IN A CAR FROM CLIENT HOME (MINUTES)	12.6	3.4
ENROLLMENT PROCESS	Enrollment occurs on-site at the first food assistance visit or may be deferred to the second visit	Clients must pre-enroll at least 1-2 days before food distribution day
DAYS AND HOURS FOR FOOD PICK-UP	4 weekdays per week, 3-4 hours per day	Typically 1 day per month during a 2-3 hour window; Day varies by site and can be weekends or weekdays
ATTENDANCE POLICY	Clients may drop-in as needed; no required attendance	Typically clients must re-enroll after missing 1-3 consecutive monthly visits; Policy can vary by site

Table 1. Access to food assistance differs between centralized and neighborhood-based Community Distribution Partner (CDP) food pantries

Community Distribution Partners (CDP) improve regular receipt of food among clients. Crossroads clients at any location are eligible to receive food once a month. Our results indicate that clients of CDPs are more likely to receive food assistance regularly, compared to food bank member pantry clients. For Crossroads clients receiving food assistance at least twice between August 31, 2016 and August 31, 2017 (N=963), CDP clients picked up food on a more regular basis. On average during this time, clients of CDPs visited 11 times, compared to clients of the food bank member pantry located at the redistribution center, who only visited only 6 times.[2]

Improving access to food may result in better health among people who are food insecure. Having a stable source of food is important because monthly volatility in food consumption may have significant health consequences. For example, in a study of California low-income inpatient admissions records, risk for hypoglycemia admission increased 27 percent in the last week of the food assistance benefit month compared to the week following receipt of benefits; no similar trend was found among higher-income patients.[3] Food consumption volatility among individuals receiving food assistance is also associated with increased obesity.[4] For these reasons, increasing accessibility to food and increasing consistency of food assistance is of paramount importance to support

the health of food insecure populations.

Community Distribution Partners may help improve access for some populations more than others. *Table 2* reflects characteristics of 1,975 clients receiving food in August-October of 2017. Results indicate that CDPs may be a preferred option for clients who are elderly and are employed part-time or self-report being disabled or having disability insurance. Notably, far more people walk to CDPs, compared to the food bank member pantry. However, data also indicate that some features of CDPs — such as limited hours — may limit accessibility for people with full-time employment.

Table 2. Age, employment, disability status, and transportation for clients of the		
Food Bank Member Pantry located at the redistribution center compared to		
clients of neighborhood-based Community Distribution Partners among n=1,975		
clients receiving food, Aug-Oct 2017.		

	FOOD BANK MEMBER PANTRY	COMMUNITY DISTRIBUTION PARTNER	
	Percent	Percent	
	CLIENT AGE		
18-59 years	76.6%	61.2%	
60-69 YEARS	16.3%	21.9%	
≥70 years	7.7%	16.9%	
EMPLOYMENT AND DISABILITY STATUS			
Full-time	38.3%	10.6%	
PART-TIME	16.5%	32.1%	
REPORTED DISABILITY OR RECEIPT OF DISABILITY ASSISTANCE	19.9%	22.8%	
TRANSPORTATION TO SITE			
CAR	72.8%	53.9%	
WALK	9.5%	32.6%	
B US/TRAIN	13.4%	1.7%	
OTHER	4.3%	11.8%	

There is considerable variability as it relates to age, employment/disability status, and transportation. We examined four separate CDPs and found that at one site, nearly a third of all clients (30.5%) were aged 70 years or older. At the same site, nearly a third of all clients (31.3%) self-report being disabled or receiving disability insurance. Likewise, transportation varies across sites. At one CDP, nearly two-thirds of clients (63.0%) walked to pick up food—twice the rate of walking seen among CDPs on average.

Reflecting on the Community Distribution Partner (CDP) Model as an Innovative Approach to Increasing Food Access

The CDP model increases the geographic reach of charitable foods into neighborhoods in which food insecure individuals live. In effect, the CDP model allows for a centralized distributor to serve as a mini-food bank for organizations too small or not suited to be a member pantry of the regional food bank. The CDP Network enables these smaller organizations to offer an improved quality, quantity, and variety of food to people in their neighborhoods. Moreover, results presented here indicate that the CDP model increases access to food for people who do not own a car.

Adoption of the CDP model was a disruptive innovation to the existing hierarchical model of food distribution utilized in North Texas and across the U.S. The CDP Model of food re-distribution has been so successful it was adopted by the North Texas Food Bank (NTFB) throughout their 13-county service area in North Texas. As of July 2018, there were 57 active CDPs, including local organizations and agencies including Dallas Housing Authority sites, low-income retirement communities, places of worship, and community centers. Together, CDPs distributed 1,437,561 pounds of food to 5,648 unique individuals, which includes 1,755 (17 and younger) children. This translates to 1,197,967 meals distributed into 28 different zip codes throughout Dallas County.

Areas for Future Study

The CDP model was designed to improve access to food assistance by removing transportation barriers for clients eligible for food bank assistance. Emerging evidence suggests that food assistance provided at CDPs is different in many social and administrative ways. Future work will seek to understand the ways in which accessing food assistance through CDPs versus a food bank member pantry presents different benefits, barriers, and outcomes for food insecure populations. For example, does the limited time during which food may be picked-up from CDPs create new barriers for the working poor or those households with full-time employment? If so, what modifications to the CDP model are needed to ensure accessibility to all populations needed food assistance? On the other hand, does the scheduled monthly pick-up time motivate clients to come to receive food on a more regular basis? Unpacking the diverse impacts of different CDP practices on client health and economic outcomes is also of interest. Identifying the critical administrative aspects of food delivery that lead to improved client outcomes will ensure that these details are not overlooked or changed when the CDP model is replicated in other populations and places. In doing so, research conducted by CARE in conjunction with Crossroads will guide future implementation and dissemination of the CDP model in the U.S.

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