

APPENDIX A
EFAS SURVEY METHODOLOGY

This appendix describes the survey work conducted for the study. We first describe the instrument development work. Next, the development of sample frame lists of pantries and kitchens is discussed. We then describe the actual survey operations and efforts taken to ensure high cooperation rates. Next, we summarize the response rates achieved.

QUESTIONNAIRE DESIGN

The questionnaire for the provider component of the EFAS study was designed to collect information about the characteristics, operating structure, service areas, and resource base of the EFAS, to estimate the type and amount of food currently flowing into the system, and to identify the barriers to, and opportunities for, increasing food resources and administrative support among system providers.

Instrument Development Process

During the development process we reviewed previous questionnaires seeking similar information from similar populations, including the Second Harvest National Food Bank Network Agency Survey, The Elderly Nutrition Program Evaluation Meal Site Survey; the Adult Day Care Study Survey of Centers.¹ Some questions were adapted from these surveys; other close-ended questions were developed to address other content needs for this survey. The questionnaire was reviewed by consultants from America's Second Harvest, IQ Solutions, Urban Institute, and Columbia University. The Office of Analysis and Evaluation and the Food Distribution Division of the Food and Nutrition Service of the U.S. Department of Agriculture (USDA) also commented on the questionnaire prior to the pretest.

Pretest

The pretest, conducted in February 1999, included nine respondents purposively selected to include large and small providers serving urban, suburban, and rural areas. The providers included unaffiliated organizations and organizations affiliated with America's Second Harvest, Foodchain (a national organization of food rescue organizations which subsequently merged with Second Harvest), Catholic Charities; the Salvation Army; and From the Wholesaler to the Hungry. All respondents received an advance letter and worksheet to help them prepare for the interview. As a result of the pretest, the preinterview worksheet was simplified, the questionnaire was shortened, and a postinterview worksheet was designed for food pantries and emergency kitchens. We added some questions, modified others, and developed a screening module to address problems identified during the pretest.

¹VanAmburg Group, Inc. *Second Harvest National Food Bank Network Agency Survey*. Erie, PA, 1997; Mathematica Policy Research, Inc. *Elderly Nutrition Program Evaluation Meal Site Survey*. Princeton, NJ, 1994; Mathematica Policy Research, Inc. *Adult Day Care Study Survey of Centers*. Princeton, NJ, 1991.

Key Features of the Instrument

The questionnaire was designed to incorporate three key features, Computer Assisted Telephone Interviewing (CATI) methodology, a screening module, and a modular structure for each of the content areas.

CATI Methodology. The questionnaire was programmed into the CATI system to permit telephone interviews with all types of providers. The system customized question wording for each provider type, performed range checks, and allowed for complex skip patterns to accommodate various provider arrangements, including co-location of two or more provider types. Following programming, the CATI version was systematically tested using scenarios designed to check the complex skip patterns.

Screening Module. The screening module was primarily designed to determine whether the respondent's organization was of the expected provider type and at the expected address. This module had other important functions, such as identifying co-located programs and determining how to deal with them and collecting information to permit additional sampling of newly identified provider types or additional sites. The screening module set the pattern of questions for the content modules that followed.

Modular Structure of Content Areas. The questionnaire is divided into seven modules to maintain the respondent's focus on a specific content area. We describe each section below:

1. ***Operating characteristics.*** This section asks about length of time the program has provided EFAS services, why they began operating at that location, the program's affiliation or sponsorship, and the types of nonfood services provided.
2. ***Acquisition of food.*** The questions in this section ask about the quantity and type of food resources obtained from different sources.
3. ***Food distribution.*** This section collects information from providers about the type and quantity of food commodities distributed to agencies and recipients, the distribution of TEFAP and other government commodities, the number of client agencies and recipients served, the number of meals served, and the size of "food baskets" distributed to recipients. This section also asks about the frequency of distributions, whether and how providers limit food distributions to agencies or recipients, eligibility requirements, and whether and how often the providers turn away agencies or recipients for lack of food.
4. ***Service areas.*** In this section, the interviewer records the names of the counties served by the provider.
5. ***Resource base.*** This section asks about the operating budget for the food program, funding sources, and paid and unpaid staff. There are also questions on transportation resources and facilities, including storage capacity.

6. ***Capacity to manage current and future changes in food demand.*** Questions in this section ask the respondent to compare the number of agencies or recipients currently served with the number served 3 years ago. Respondents are also asked to assess unmet food-related needs and to project the capacity of the program to respond to increased demand over the next year, as well as what actions the program would take to fulfill that demand.
7. ***Capacity to manage current and future changes in food resources.*** This section parallels the previous section but asks the respondent about changes in food donations, sources of food, and limitations on the distribution of certain foods, comparing the current situation with that of 3 years ago. There are also questions about whether and how often providers pass up available food or run out of food.

DEVELOPING THE FRAME OF EMERGENCY FOOD PROVIDERS

There were four phases in developing the frame of emergency food providers, (1) assembling initial lists of providers; (2) identifying additional providers through contacts with local informants; (3) assessing needs for additional information; and, (4) organizing and sorting information from multiple sources.

Initial lists of food pantries and emergency kitchens

In order to construct a sample frame of food pantries and emergency kitchens, we started with partial lists of pantries and kitchens obtained from food banks in America's Second Harvest network. In addition, we received similar lists from independent food banks, food rescue programs, and The Emergency Food Assistance Program (TEFAP) state directors. As we received these lists, the information was separated into the various geographic areas in the United States that were chosen as primary sampling units (PSUs) for this study.

Calls to local informants

The next step was to supplement the information from these lists with extensive contacts with local sources in each of the areas selected as PSUs. This second level of contacts included organizations likely to be knowledgeable about emergency food providers at local or county levels.

A folder containing the partial list(s) of pantries and kitchens was set up for each PSU. Each folder also included a printout that was created to list the counties, towns, area codes, and zip codes within the PSU for reference. The name of the county seat was highlighted to signify an important starting point for calls. As a further promising source of contacts with local informants within the PSU, we also identified the 10 most populous cities in each county.

Executive interviewers were trained in the overall study background, the objective of the food pantry and emergency kitchen list-building phase, and the procedures they would use to contact local informants. This training included familiarizing interviewers with the information in the folders that would assist them in obtaining names and locations of other emergency kitchens and food pantries.

In addition to the PSU folders, interviewers were given three forms that they used to organize and collect information from local informants: (1) an informant master list, which suggested generic points of contact that might have useful information about emergency food providers in their communities (for instance, a county welfare agency); (2) an informant contact record, used to record the name and contact information for calls made to informants in the process of list building; and (3) an EFAS provider list, used to collect the names and contact information for pantries and kitchens identified through contacts with local informants.

Interviewers worked on only one geographic area at a time and were allotted approximately 15 contacts in each PSU to build lists of emergency food providers. They began work in a PSU by calling directory assistance for phone numbers of suggested informants in counties listed within the PSU. These telephone numbers were then recorded on the informant master list form. Next, the interviewers called the suggested informants, explained that they were putting together a list of emergency food providers for a USDA research project, and asked for help in compiling a list of pantries and kitchens in the area. If any pantries and/or kitchens were identified by the informant, they were recorded by the interviewer on the EFAS provider list form. In many cases, informants would follow through with locally developed lists of food providers in their area via fax, mail, or email; once these lists were received, the interviewer organized them into the corresponding PSU folder. If an informant was able to refer the interviewer to another source of information, that information was recorded for further calls.

Review of calls to local informants

Telephone center supervisors reviewed each PSU folder when interviewers believed they had located all of the providers in the area or had made their maximum number of calls. The supervisor determined whether a variety of informant types had been contacted and whether information was gathered from a representative distribution of areas within the PSU. If additional information was needed, the folder was returned to the interviewer with directions on what area(s) and/or type of informant(s) should be contacted next to complete the calls for that area. Folders deemed complete by the supervisory staff were sent to the project management staff, where a second level of review for completeness was undertaken. Once again, if it was determined that further calls should take place within a PSU, the folder went back to the interviewer with directions.

Sample frame deduplicating, labeling, and numbering

Once the calls to local informants within the PSUs were complete, the lists were ready to be combined and deduplicated to develop one comprehensive list of pantries and kitchens for each PSU. To begin the process of deduplicating, the largest list or the list with the most logical order in the PSU was identified and labeled as List #1. List #1 was then checked for duplications, and any organizations found to be repeated on that list were crossed out. Then each agency on the list was examined and a decision made as to whether it was a kitchen, pantry, or unknown. Kitchens on the list were labeled with a “K,” pantries with a “P,” unknown agencies with a “U,” and any facilities thought ineligible for the survey were crossed out. If the eligibility of an agency was in doubt, we assumed the agency was eligible and included it. Then the next list for the PSU to be deduplicated was selected and the agencies on it compared with those on the first

list. This process was repeated for each list, comparing it with every earlier list, and continued until all the lists for a PSU had been processed.

Once all facilities in a PSU were classified, sequential numbers were assigned to the kitchens (for example, K1, K2, K3, ...), pantries (for example, P1, P2, P3, ...), and unknown agencies (for example, U1, U2, U3, ...) across all lists within a PSU. Thus, one comprehensive list of food provider types included in the study was created for each PSU. After numbering of agencies within a PSU was complete, a count of kitchens, pantries, and unknowns was recorded. This count was compared to an estimate of expected pantries and kitchens for the PSU by the Survey Director as part of her quality review. The organized lists were then submitted to the statisticians for sampling.

DATA COLLECTION

Data collection was spread over two survey operations centers to optimize the use of interviewers. These state-of-the-art centers, in Princeton, New Jersey and Columbia, Maryland, together provide 200 computer-assisted telephone interviewing stations and are networked, providing the centers with the capability to jointly interview for the project. The data collection effort began in March 2000, preceded by the first of several interviewer training sessions. The last interview was completed on October 10, 2000.

Interviewer Training

Multiple interviewer training sessions were held to accommodate the 41 interviewers in both survey operations centers. Each training session provided an overview of the project and its goals, a question-by-question explanation of the instrument, and guided practice in its administration. All interviewers, monitors, and supervisors received training materials, which included a written introduction to the project, a review of interviewing techniques, an overview of the sample construction, a discussion of contacts with sample members, an explanation of each question, and samples of advance letters and pre- and post-interview worksheets. Beyond the initial training in all of these areas, interviewers were instructed to continue using the training materials as an ongoing reference throughout the interview period. Guided practice provided the opportunity for the interviewers to become familiar with the questions and allowed them time to clarify any questions of their own before they were began interviewing.

Supervision and monitoring

The survey operations centers are arranged with supervisors positioned in the center of the interviewing stations for immediate access to the interviewers. In addition, trained interviewer monitors in both sites use a central monitoring system through which they are able to listen to both the interviewer and the respondent and to see the screen as it is used by the interviewer. Monitors check for any errors interviewers may make in asking the questions as worded and in the use of probes or definitions; they also check that responses have been correctly entered into CATI. Monitoring feedback sessions follow the interview so that interviewers can be made aware of any problems and receive further training, if warranted.

Efforts to Increase Respondent Cooperation.

We used standard methods for increasing respondent cooperation, as well as developing specific methods to accommodate the characteristics of emergency food providers. These characteristics were related, for example, to the large number of faith-based organizations and their nontraditional working hours and heavy dependence upon volunteer staff and to the lack of standardized record keeping among smaller providers.

Advance Letter and Worksheet. We sent an advance letter to all food providers to explain the study and encourage participation. Letters to food banks included a preinterview worksheet to assist respondents in preparing for the telephone interview. The worksheet included items on food supplies, food distribution, funding, staffing, and facilities. (Food banks received this more detailed mailing because they were more likely than other providers to keep standardized records and less likely than other provider types to be “put off” by the worksheets.)

Locating Efforts. The data collection also involved a substantial “locating” component. Many of the locators were also involved in the list-building phase of the project and were very familiar with all the resources available for locating providers. Cases were sent to “locating” when our original information did not include a phone number or when the number provided was determined to be incorrect. Locators were asked to find a new phone number for the emergency food provider, and, if possible, a new address. At the same time, locators attempted to determine whether the provider met basic eligibility requirements.

A variety of methods were used to locate the providers. The most valuable resource was the collection of county-level lists developed during the list-building phase of sample construction. Locators were sometimes able to identify a new telephone number for the provider from these lists. Alternatively, locators called other providers, including the source who originally gave us the information about the unlocated provider. Locating staff also called sources who were helpful in the original list-building to ask for assistance in locating providers.

Additionally, locators used directory assistance and internet phone directories. Search engines were used to locate some organizations, and websites were also used to locate faith-based organizations. *Churchangel.com*, which lists the address and phone number of churches by denomination and by city and state, was a useful source.

When locators obtained a new phone number, the number was called for verification. Locators verified or corrected the address information and asked if a food service provider existed at the sampled location. Some of the locating work required Spanish speakers, and attempts to verify numbers for faith-based programs sometimes required calls on Sunday morning.

In total, approximately 65 food banks, 600 kitchens, 650 pantries, and 21 food rescue programs and emergency food organizations required some locating effort, with some of them requiring multiple efforts.

During the locating process, approximately 564 cases were determined to be ineligible. Of this number, 156, or 28 percent, were no longer operating. Another 161, or 29 percent, claimed to

provide no food service at the sampled location. Fifty-two providers, or 9 percent, were not of the sampled type. (A pantry may have been misidentified as a kitchen, for example.) Sixty-six cases, or 12 percent, were determined to be duplicates of another listed provider. Additionally, there were 67 cases, or 12 percent, that did not qualify under our definition for EFAS providers. These included providers who served only children or seniors and shelters that served only residents. An additional 13 cases, or 2 percent of the ineligible, were located outside the sampled county. Finally, 49 providers, or 9 percent, had moved from or did not operate at the sampled location. Some additional cases were identified as ineligible during the screening portion of the telephone interview.

Calling schedule. Interviewers called providers from 9 a.m. to 8 p.m. Monday through Friday, 10 a.m. to 5 p.m. Saturday, and 12 p.m. to 8 p.m. Sunday. At least once a month the Sunday calling hours were expanded to 8 a.m. to 12 p.m. Early morning weekday calls before 9 a.m. or late evening calls after 8 p.m. were made at the request of individual providers.

Unlimited attempts to contact respondents. In our effort to achieve the highest response rates possible, we did not place an upper limit on the number of calls to providers. Almost six percent of the completed interviews required more than 25 calls (tables A.1 and A.2). Many of the smaller providers did not have answering machines, and interviewers were unable to leave messages with a toll-free number for respondents. Reaching such providers often required extensive tries.

Spanish translation of survey instrument. We trained bilingual interviewers and prepared a Spanish translation guide for the CATI instrument to accommodate providers who preferred to conduct the interview in Spanish. There were a small number of providers who exercised this option.

Post-Interview Worksheet. The CATI instrument was designed to identify key questions covering food supplies, food distribution, operating budget, funding, and staffing that respondents were sometimes unable to answer during the interview. At the close of the interview, those respondents were asked if they would be able to provide information on these questions in a post-interview worksheet. Post-interview worksheets were sent only to respondents who were willing and able to provide the information. Approximately 450 completed worksheets were returned by respondents.

RESPONSE RATES

Most of the EFAS agencies contacted were interested in the survey and viewed it as a chance to share information about their important activities. In addition, as noted above, MPR devoted extensive resources to the survey to ensure a high response rate and a representative sample.

These factors resulted in extremely favorable response rates. Overall response rates for the emergency kitchen and pantry surveys were 94 and 95 percent, respectively (table A.3). The response rates attained in the other three surveys ranged from 94 to 98 percent. Details of how these rates were computed are documented in the next section of this appendix.

Table A.4 provides detailed information about the components of the response rates for the two largest surveys—those for emergency kitchens and food pantries. As summarized in the table, both surveys had a high rate of sample members who proved to be ineligible for the survey. In part, this resulted from the stringency of our criteria for eligibility. Sample points were defined in terms of *both* a location *and* a type of provider (see Appendix E). Therefore, if a sampled organization was found either not to be at the expected location or not delivering the type of EFAS services expected, it was declared ineligible. (Of course, it had an independent probability of being selected under the correct location and type.) Also, the nature of the sample frame-generation process virtually guaranteed a substantial level of ineligible sample points, since the local informants were often able to supply only fragmentary information. In general, we chose to include cases that were uncertain, knowing they would be screened out when they were contacted.

Details of response rate calculations

The following notes document how the response rates were calculated. The methods used correspond to those recommended by the Council of American Survey Research Organizations in *Report of the CASRO Completion Rates Task Force, NY: Audits and Surveys, Inc.* 1982.

Response outcomes

<i>Status</i>	<i>Kitchens</i>	<i>Pantries</i>
Eligibility Unknown (EU)	141	87
Ineligible (I)	1,302	729
Duplicate Provider	176	79
Eligible and Complete (EC)	1,518	1,617
Eligible and Incomplete (EI)	20	20

Percentages of the following outcomes of the initial survey and the questionnaire were calculated as follows for kitchens and pantries:

Deduplication Rate (the percentage of the frame that consisted of unique providers)

$$\text{Kitchens: } DR = \frac{\text{Unique Providers}}{\text{Duplicate Providers} + \text{Unique Providers}} = \frac{2,981}{177 + 2,981} = 0.94$$

$$\text{Pantries: } DR = \frac{\text{Unique Providers}}{\text{Duplicate Provider} + \text{Unique Providers}} = \frac{2,453}{79 + 2,453} = 0.97$$

Where : DR = the percent of providers on the initial list found to be unique during the deduplication process

Eligibility Rate (the rate at which facilities were found eligible for the survey)

Kitchens: $ER = \frac{EC + EI}{I + EC + EI} = \frac{1,517 + 20}{1,302 + 1,517 + 20} = 0.54$

Pantries: $ER = \frac{EC + EI}{I + EC + EI} = \frac{1,617 + 20}{729 + 1,617 + 20} = 0.69$

Where:

ER = the percent of sample members found eligible for the survey.

EC = the number eligible providers that completed the survey)

EI = the number of eligible providers that did not complete the survey

I = the number of sample members found ineligible for the survey

Eligibility determined rate (the rate at which eligibility of providers was determined)

Kitchens: $RR_E = \frac{I + EC + EI}{EU + I + EC + EI} = \frac{1,302 + 1,517 + 20}{141 + 1,302 + 1,517 + 20} = 0.95$

Pantries: $RR_E = \frac{I + EC + EI}{EU + I + EC + EI} = \frac{729 + 1,617 + 20}{87 + 729 + 1,617 + 20} = 0.96$

Where:

RR_E = the percent of providers for which an eligibility determination could be made

Questionnaire Completion Rate (the rate at which contacted facilities completed the questionnaire)

Kitchens: $RR_Q = \frac{EC}{EC + EI} = \frac{1,517}{1,517 + 20} = 0.99$

Pantries: $RR_Q = \frac{EC}{EC + EI} = \frac{1,617}{1,617 + 20} = 0.99$

Where:

RR_Q = the percent of eligible providers that completed the survey.

Overall Eligibility Rate

(Duplication Rate) x (Eligibility Rate) = Overall Eligibility Rate

Kitchens: $0.94 \times 0.54 = 0.51$

Pantries: $0.97 \times 0.69 = 0.67$

Final Response Rates

(Eligibility Determined Rate) x (Questionnaire Completion Rate) = Final Response Rate

Kitchens: $0.95 \times 0.99 = 0.94$

Pantries: $0.96 \times 0.99 = 0.95$

Table A.1
Telephone calls to achieve completed interviews, by provider type

Provider Type	1 to 4 Calls		5 to 9 Calls		10 to 14 Calls		15 to 25 Calls		More than 25 Calls	
	Number	Percent ^a	Number	Percent ^a	Number	Percent ^a	Number	Percent ^a	Number	Percent ^a
Food Banks	231	57.9	11	27.8	34	8.5	16	4.0	7	1.8
Emergency Food Organizations	67	57.3	33	28.2	13	11.1	2	1.7	2	1.7
Food Rescue Programs	37	41.6	28	31.5	11	12.4	9	10.1	4	4.5
Food Pantries	765	46.7	389	23.7	227	13.8	152	9.3	106	6.5
Emergency Kitchens	659	42.6	430	27.8	199	12.9	152	9.8	105	6.8
All Provider Types	1,759	46.4	991	26.2	484	12.8	331	8.7	224	5.9

^aPercentages are percentages of all cases in the row. For instance, 13.8 percent of food pantry completions required 10 to 14 calls.

Table A.2
Maximum, median, and mean number of calls to achieve completed interviews by provider type

Provider Type	Maximum Number of Calls	Median Number of Calls	Mean Number of Calls
Food Banks	39	4	5.8
Emergency Food Organizations	31	4	5.3
Food Rescue Programs	42	3	7.8
Food Pantries	74	15	8.4
Emergency Kitchens	84	5	9.0

Table A.3
Survey response rates

Survey	Initial Sample	Completions	Response Rate (Percent)
Emergency kitchens	3157	1517	94 ^a
Pantries	2532	1617	95 ^a
Food Banks	474	395	98
Food rescue organizations	136	88	97
Emergency food organizations	398	117	94 ^a

^aAs described in the text, the response rate is computed adjusting for a large number of sample points that proved to be ineligible for the survey and a smaller number that were duplicates of other sample members. The incompletes are allocated to eligible and ineligible status in proportion to the number of sample members for whom eligibility was determined.

Table A.4
Detailed survey outcomes for emergency kitchens and food pantries

	Kitchens	Pantries
Completes; eligible	1,517	1,617
Incomplete; eligible	20	20
Duplicates	177	79
Incomplete; eligibility unknown	141	87
Refusal	28	21
Couldn't find locating information	44	32
Couldn't contact	68	32
Other	1	2
Ineligible	1,302	7
		29
Locating group	278	212
No longer operating	65	81
No food service at sampled location	87	64
EFAS operator at location but not sampled type	27	18
Did not meet EFAS provider definition	56	19
Had moved from sample location	22	25
Other	8	5
Telephone center	1,024	517
No EFAS provider at location	437	396
EFAS provider at location but not of sampled type	304	49
Other	283	72
Total	3,157	2,532

SOURCE: Survey

records.