

September 2000

FOOD ASSISTANCE

Activities and Use of Nonprogram Resources at Six WIC Agencies



G A O

Accountability * Integrity * Reliability

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Abbreviations

CPA	competent professional authority
CPC	Community Progress Council
FNS	Food and Nutrition Service
GHS	Grady Health System
HHS	Department of Health and Human Services
ITO	Indian Tribal Organization
ITCA	Indian Tribal Council of Arizona
IHS	Indian Health Service
NSA	nutrition services and administration
USDA	U.S. Department of Agriculture
WIC	Special Supplemental Program for Women, Infants, and Children



B-286011

September 29, 2000

The Honorable Richard G. Lugar
Chairman
The Honorable Tom Harkin
Ranking Minority Member
Committee on Agriculture, Nutrition, and Forestry
United States Senate

The Honorable William F. Goodling
Chairman
The Honorable William (Bill) Clay
Ranking Minority Member
Committee on Education and the Workforce
House of Representatives

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a federally funded nutrition assistance program administered by the U.S. Department of Agriculture's (USDA) Food and Nutrition Service (FNS). This program provides supplemental foods and nutrition services to lower-income pregnant, breastfeeding, and postpartum women, infants, and children up to age 5 who are at nutritional risk. In fiscal year 1999, WIC benefits and services were provided to a monthly average of 7.3 million individuals.

In fiscal year 1999, the Congress appropriated about \$3.9 billion for WIC. Almost three-fourths of these funds (\$2.8 billion) were used to provide food benefits to participants, typically in the form of vouchers used to obtain approved foods at authorized retail food stores, commonly referred to as vendors. The remaining funds (\$1.1 billion) were used to make grants to states' WIC agencies for nutrition services and administration. The nutrition services supported by federal grant funds are (1) participant services—activities, such as certifying that a woman or child is eligible to participate in the program, issuing food benefits, and making referrals to other health or social services; (2) nutrition education—providing individual or group education designed to improve participants' dietary habits and health status; and (3) breastfeeding promotion and support—educating women about the benefits of breastfeeding their infants and providing the support necessary to enable them to breastfeed. Administration activities supported are the typical management functions

necessary to support program operations, such as accounting and record-keeping.

By law, in fiscal year 1999, the federal grants for nutrition services and administration made to state agencies were based on a national average of \$11.64 per participant per month.¹ In fiscal year 1999, these grants supported program operations at 88 state-level WIC agencies (including agencies in all 50 states, the District of Columbia, American Samoa, the Commonwealth of Puerto Rico, Guam, and the U.S. Virgin Islands, and 33 Indian tribal organizations). Most state-level WIC agencies retain a portion of their grants and pass on the remaining funds to the nearly 1,800 local WIC agencies, which are operated by sponsoring organizations such as county health departments. Some of the state-level agencies—those that operate the program at both the state and local levels—retain all of their WIC grants.

In addition to federal WIC funds, other resources may be used to support nutrition services and administration, such as WIC funds made available by state or local governments, and nonprogram resources, such as in-kind contributions of space, made by local WIC agencies' sponsoring organizations.² A 1988 study prepared for USDA found that at 16 WIC agencies, for every dollar in costs covered with program funds, about 54 cents in additional costs were covered by nonprogram resources.

¹ The Child Nutrition Act of 1966, as amended by section 123(a)(6) of P.L. 101-147, 103 Stat. 898, Nov. 10, 1989.

² In this report, "in-kind" refers to something of value, such as office space, equipment, supplies, and services, that is donated from public or private sources at no cost to the WIC program.

To help the Congress better understand the costs of administering WIC and delivering nutrition services, the William F. Goodling Nutrition Reauthorization Act of 1998 (P. L. 105-336) directed GAO to assess various cost aspects of WIC nutrition services and administration. This report is the second in a series responding to this request for information. The first report provided information on federal and nonfederal resources obtained and expended by state-level and local WIC agencies nationwide for nutrition services and administration.³ This report provides in-depth information on how WIC agencies deliver nutrition services and administer the program and the resources they use. Specifically, it provides information on the (1) ways WIC agencies deliver nutrition services and administer the program; (2) ways staff at WIC agencies allocate their time delivering nutrition services and administering the program; and (3) types of nonprogram resources used by WIC agencies and the extent to which such resources are used to cover the costs of delivering nutrition services.

Because it was not practical to obtain in-depth information regarding these issues from a statistically representative sample of the over 1,800 agencies providing services to participants, we conducted case studies at six WIC agencies. We chose the six agencies to provide a range of characteristics, such as geographic location, numbers and types of participants served, and type of sponsoring organization. The six WIC agencies studied included five local agencies: Gallatin WIC in Montana; Grady WIC in Atlanta, Georgia; Kanabec WIC in Minnesota; Long Beach WIC in California; and York WIC in Pennsylvania; and one Indian tribal organization, Zuni WIC in New Mexico, which functions as both a state-level and local WIC agency. In addressing our second objective, we conducted 1-month time studies at each of the case study agencies. During these studies, we recorded and summarized the amount of time WIC staff spent performing various activities. The results of our case studies are not generalizable to all WIC agencies.

We performed our work from July 1999 through August 2000 in accordance with generally accepted government auditing standards. Appendix I contains a detailed description of the methodology we used to conduct this work.

³ The first report in the series was *Food Assistance: Financial Information on WIC Nutrition Services and Administrative Costs* (GAO/RCED-00-66, Mar. 6, 2000). Subsequent reports will provide information on performance measures used to assess nutrition services and the impact of WIC services in the areas of nutrition education, breastfeeding promotion, and referrals.

Results in Brief

WIC agencies can vary considerably in the ways they deliver nutrition services and administer the program. For example, the six agencies we studied differed in the (1) manner in which they obtained health information, such as the results of a blood test for anemia, needed to assess the level of participants' nutritional risk; (2) amount and type of nutrition education typically provided to participants; and (3) level and nature of breastfeeding support, such as visiting a new mother in the hospital after delivery. Factors affecting the delivery of nutrition services or administration included the state program's policies and procedures, the characteristics of the sponsoring organization, and resource constraints.

Because WIC agencies differ in how they deliver services and administer the program, the amount of time WIC staff spend on specific activities can vary. For example, at the six agencies, our time studies found that the proportion of staff time spent on nutrition services activities as opposed to administrative activities varied greatly. At two agencies, staff spent more than two-thirds of their time on nutrition services activities, while the staff at two other agencies spent less than half of their time on these activities. As a result of this variation, the agencies differed in the amount of time spent in direct contact with participants—either in-person or over the telephone. Staff at one agency, for example, spent over 60 percent of their time on activities involving direct contact with participants, while staff at another agency spent about 31 percent.

The six WIC agencies we studied used a variety of nonprogram resources to deliver WIC services, the most common being in-kind contributions from their sponsoring organizations. The share of costs covered by nonprogram resources at the six agencies ranged from about 20 cents to 2 cents for each dollar in costs covered with program funds. The extent to which nonprogram resources were used to cover the costs of delivering WIC services did not approach the level of 54 cents for every dollar in costs covered with WIC funds that was cited in a 1988 research study.

Background

In fiscal year 1999, state-level and local WIC agencies received approximately \$1.1 billion in federal grants for nutrition services and program administration. States or local governments are not required to match any portion of these federal funds. However, as we reported in March 2000, 10 states and the District of Columbia provided additional funds for nutrition services and administration in fiscal year 1998—a total of \$38 million. In addition, 29 percent of the 1,416 local WIC agencies that responded to a nationwide survey we conducted in 1999 reported receiving a combined total of about \$19 million for nutrition services and administration from nonfederal sources in fiscal year 1998.⁴ Nationwide, the total of these nonfederal program funds represent a very small portion of the program resources used for nutrition services and administration—about 5 percent in fiscal year 1998.

In addition to program funds, the WIC program has traditionally used nonprogram resources, such as in-kind contributions, to fully operate the program. No recent information was available on the value of these nonprogram resources used to cover some of the costs of providing nutrition services and administering the program. According to a 1988 study of 16 case study WIC agencies prepared for USDA by Abt Associates, for every dollar in costs covered by WIC program funds, about 54 cents in additional costs were covered by other resources—mostly in the form of contributions from WIC agencies' sponsoring organizations.⁵

Local WIC agencies, which spend over three-quarters of nutrition services and administration program funds, are operated by a variety of types of public and private organizations; provide services in different types of geographic settings (urban, rural); and vary considerably in size in terms of the number of participants they serve. WIC agencies can also vary in the size and composition of their staff. Appendix II provides information on selected characteristics and the staffing at the six agencies we studied.

WIC agencies use their nutrition services and administration grants to support activities in four cost categories: (1) participant services, (2) nutrition education, (3) breastfeeding promotion and support, and (4)

⁴ We conducted the survey for our report entitled *Food Assistance: Financial Information on WIC Nutrition Services and Administrative Costs* (GAO/RCED-00-66, Mar. 6, 2000). That report contains a description of the survey methodology.

⁵ *Synthesis of Case Study Findings in the WIC Program*. (Abt Associates, Dec. 1988)

program administration. Table 1 shows some of the specific activities conducted by these WIC agencies in each of the categories.

Table 1: Nutrition Services and Administration Activities by Cost Category

Cost category	Activities
Participant services	<ul style="list-style-type: none"> Certifying that individuals meet program eligibility criteria by obtaining and reviewing information regarding (1) income or participation in a qualifying program such as Medicaid; (2) residency; (3) pregnancy or postpartum status, childrens' age; and (4) medical risks, such as anemia, and/or nutritional risk such as inadequate diet. Explaining program policies and procedures. Scheduling participants for nutrition services, including nutrition education, voucher pick-ups, and recertification. Issuing food benefits—typically in the form of vouchers to be redeemed at grocery stores.^a Referring participants to needed health care, such as immunization, and social services, such as the Food Stamp and Medicaid programs, as well as voter registration. Preparing Individual Care Plans
Nutrition education	<ul style="list-style-type: none"> Providing individual nutrition sessions. Providing group education sessions. Preparing or obtaining nutrition education materials, such as brochures and videotapes. Interpreting sessions or translating material to facilitate nutrition education of non-English-speaking participants. Consulting with medical providers regarding nutrition education. Providing or receiving training regarding nutrition education promotion. Evaluating and monitoring nutrition education.
Breastfeeding promotion and support	<ul style="list-style-type: none"> Providing individual counseling sessions to promote or support breastfeeding at WIC clinics or in the hospital. Providing group breastfeeding support sessions. Providing telephone support to breastfeeding mothers. Maintaining a clinic environment that encourages breastfeeding. Consulting with medical providers regarding breastfeeding issues. Preparing and providing breastfeeding educational materials. Providing or receiving training regarding breastfeeding promotion. Monitoring and evaluating breastfeeding promotion activities.
Administration	<ul style="list-style-type: none"> Outreach to potential participants and health care providers and social service organizations. Clerical tasks. Accounting, budgeting. Personnel, including recruitment and retention of staff. General management tasks such as planning, developing policies and procedures, and managing the use of space and equipment. Monitoring vendors. Program reporting.

^aIn addition to vouchers, food benefits can be issued in the form of checks, coupons, and other documents. Gallatin WIC, located in Montana, issues WIC checks instead of vouchers.

In general, WIC agencies can use program funds for nutrition services and administration for costs that can be classified as either direct or indirect. According to the program's regulations, direct costs are those that can be identified specifically with WIC-related activities, such as salaries for staff who provide nutrition education and breastfeeding counseling. Indirect

costs are for services that benefit the program but are not easily linked specifically to WIC, such as purchasing, communications, and accounting services.

WIC Agencies Varied in How They Provided Nutrition Services and Administer Their Programs

WIC agencies can vary considerably in the ways they deliver nutrition services and administer the program. The five local agencies and Indian tribal organization we studied all provided the three types of nutrition services—participant services, nutrition education, and breastfeeding promotion and support—and conducted administration activities; however, they differed in some of the ways they delivered these services and administered the program. The following provides examples of this variation.

Participant Services

- Long Beach staff did not routinely measure participants' height and weight and test blood for anemia, as was typically done at the other agencies to obtain required medical information (see fig. 1). Instead, Long Beach obtained this information from participants' health care providers.
- Gallatin and Kanabec staff routinely prepared individual care plans for all participants while staff at the other agencies did so only for participants considered to be high risk.^{6,7}
- Kanabec issued vouchers to adult participants who were not considered to be at high nutritional risk every 3 months, while the other agencies issued vouchers or checks to such participants at least every 2 months.
- Five of the six agencies—Gallatin, Grady, Long Beach, York and Zuni—to varying degrees, offered services during scheduled evening hours. For example, Long Beach's main site had extended hours from 6:00 p.m. to 7:00 p.m. on Mondays and Tuesdays, while York's main clinic stayed open until 6:30 p.m. 3 days a month. Gallatin and Long Beach also

⁶Program regulations give agencies discretion to determine which participants must have plans. However, regulations do require that plans must be prepared for participants requesting them.

⁷State WIC agencies use varying criteria to determine which participants are considered to be high-risk.

offered scheduled weekend hours.

- Grady, Long Beach, York, and Zuni staff routinely asked participants of their interest in registering to vote; Long Beach, York, and Zuni maintained a record of the offer. For example, at York, in accordance with state policy, staff recorded information regarding voter registration in the participant's record, on a data collection form, and in the data system, and assisted the participant in completing the form. At Gallatin and Kanabec, staff simply made voter registration forms available to participants.

Figure 1: Performing a Blood Test at the York WIC Agency



Nutrition Education

- Nutrition education was typically provided at all six agencies during the participant's certification and/or recertification session (see fig. 2). The sessions that we observed, which included nutrition education, lasted from 10 minutes at Grady to more than 60 minutes at Gallatin.
- In addition to these sessions, Long Beach provided nutrition education through about a dozen classes daily at each of its clinics. Gallatin, Grady, and Zuni also offered weekly, bimonthly, or monthly classes, while York and Kanabec did not offer nutrition education classes at all.
- Grady staff, when needed, provided nutrition education that involved medical nutrition counseling (to diabetic WIC participants, for example), while staff at the other agencies typically referred participants to non-WIC dietitians if such counseling was needed.
- Only Zuni staff offered regular nutrition education to child participants, even though children represented at least half of the participants at five of the six agencies.
- Only Grady used computer technology in the form of a touch-screen kiosk to provide nutrition education to participants.

Figure 2: A Recertification Session at a Long Beach WIC Site



Breastfeeding Promotion and Support

- Like nutrition education, breastfeeding was typically promoted during individual sessions. Gallatin, Grady, Long Beach, and Zuni also offered breastfeeding classes.
- Staff at three of the agencies—Grady, Long Beach, and Zuni—routinely visited participants in the hospital after childbirth to encourage and support breastfeeding.

-
- Staff at all of the agencies were trained to promote breastfeeding. In addition, Grady, Zuni, and York staff included at least one certified lactation consultant.

Program Administration

- While all of the agencies utilized an automated participant database system, Long Beach was the only agency to maintain minimal paper records. In contrast, York, because it lacked a sufficient number of computers, relied on paper records and data entry staff to enter participant information into the state's data system.
- York staff played a major role in training and monitoring vendors and assisted state agency staff in approving vendors' applications. The other four local agencies performed limited vendor management activities because this was a state-level responsibility. At Zuni—a state-level agency—staff were heavily involved in all aspects of vendor management.
- All of the agencies, except Kanabec, provided services at satellite clinics or sites. Gallatin, York and Zuni staff traveled to satellite clinics or sites to provide services, while Long Beach and Grady staff did not. Kanabec did not operate satellite clinics but did offer participants free or reduced-cost transportation, on request.

A number of factors, including state program policies, the characteristics of the sponsoring organization, and resource constraints, affected how the agencies delivered services and contributed to some of the variation we observed. For example, state policy strongly encourages Long Beach to obtain needed medical information from the participants' health care providers. Similarly, staff at Gallatin prepared individual care plans for participants in accordance with established state program policy.

The characteristic of the sponsoring agency also affected service delivery. For example, because Grady was operated by a hospital, WIC dietitians routinely provided medical nutrition counseling to participants in need of such services, rather than making referrals to non-WIC dietitians. In addition, staff at Zuni WIC, the only state-level agency that we studied, carried out some activities, such as those associated with approving vendors and reimbursing them for vouchers, that are not typically performed by local agencies.

Finally, agency officials and staff at the five local agencies reported that insufficient resources affected how services were delivered. For example, York and Grady officials attributed the limited time staff spent providing nutrition education and/or breastfeeding promotion and counseling to insufficient staffing. Staff constraints are being exacerbated, according to some of the agency directors, because it is becoming increasingly difficult to retain and recruit staff with the salaries and benefits the program is able to offer. For example, according to the York WIC Director, the agency offers a nutritionist or dietitian half the hourly rate offered at the area hospital.

Appendix III contains additional information on variations we found in the ways the agencies delivered nutrition services and administered the program, and appendix IV summarizes these activities for each agency.

The Amount of Time WIC Staff Devoted to Different Nutrition Services and Administration Activities Varied by Agency

Our time studies at the six agencies found they varied considerably in the amount of time staff spent on different activities. For instance, as shown in table 2, at Long Beach and Gallatin, staff spent over 70 percent of their time on nutrition services, while at two other agencies staff spent less than half of their time on these activities.⁸ These two agencies were Zuni WIC, a state-level agency, and York, the only local agency with major vendor management responsibilities.

⁸In addition to examining the percent of staff time spent on each activity, we analyzed the percent of staff time costs that were devoted to each activity. We did this by using information on the amount of time that each individual spent on an activity as well as the individual's hourly wage rate. We found there was little difference between the percent of staff time and the percent of staff time costs for the various activities. Staff time and staff time costs percentages are reported in app. V.

Table 2: Percent of Total Staff Spent on Nutrition Services and Administration Activities

Agency	Percent of total staff time spent on				
	Nutrition services activities			Total nutrition services	Administration activities
	Participant services	Nutrition education	Breastfeeding promotion and support		
Gallatin	52.8	13.6	5.0	71.4	28.6
Grady	43.2	8.8	6.7	58.7	41.3
Kanabec	37.9	9.0	5.4	52.3	47.7
Long Beach	48.8	19.2	3.4	71.4	28.7
York	39.0	4.8	.8	44.6	55.5
Zuni ^a	23.6	12.9	7.6	44.1	55.8

Note: Totals may not add due to rounding.

^aZuni WIC was the only state-level agency. Some staff time at Zuni WIC was spent on activities normally performed at state-level agencies, such as developing program plans and reimbursing vendors. Our time study did not distinguish between state- and local-level activities at Zuni WIC.

Because the agencies varied somewhat in their participant-to-staff ratios—the number of participants served per full-time-equivalent staff—we also analyzed the results of our time studies in terms of the minutes per participant per month spent on the various activities. (Hereafter, per participant per month is referred to as per case-month.) Table 3 shows the results of our time studies in terms of the approximate number of minutes spent per case-month. Again, there is considerable variation among the agencies. Additionally, this table, in combination with table 2, shows that agencies devoting similar percentages of staff time to an activity can differ in the absolute amount of time spent on that activity. For example, while Gallatin and Long Beach staff both spent about 28 percent of their time on administrative activities, this amounted to 8.9 minutes per case-month at Gallatin and 5.2 minutes at Long Beach. This is because the two agencies differed in the total amount of staff time per case-month that was available to perform all nutrition services and administrative activities.

Table 3: Approximate Minutes per Case-Month Spent on Nutrition Services and Administration Activities

Agency	Approximate minutes per case-month						Total time available for all nutrition services and administration activities ^a
	Spent on nutrition services activities				Total spent on nutrition services	Spent on administration activities	
	Participant services	Nutrition education	Breastfeeding promotion and support				
Gallatin	16.4	4.2	1.6	22.2	8.9	31	
Grady	10.8	2.2	1.7	14.7	10.3	25	
Kanabec	8.0	1.9	1.1	11.0	10.0	21	
Long Beach	8.8	3.5	.6	12.9	5.2	18	
York	12.5	1.5	.3	14.3	17.8	32	
Zuni ^b	17.0	9.3	5.5	31.8	40.2	72	

Note: Totals may not add due to rounding.

^aRepresents all staff time available to perform nutrition services and administration activities, including that of administrative and support staff.

^bZuni WIC was the only state-level agency. Some staff time at Zuni WIC was spent on activities normally performed at state-level agencies, such as developing program plans and reimbursing vendors. Our time study did not distinguish between state- and local-level activities at Zuni WIC.

As might be expected, the amount of time spent on specific activities within each of the four categories of activities—participant services, nutrition education, breastfeeding promotion and support, and administration—also varied among the agencies. This variation is illustrated in the amount of time spent on providing nutrition education and breastfeeding promotion and support directly to participants in one-on-one or group sessions. Table 4 shows that Gallatin staff spent 4.5 minutes per case-month on these activities, while York and Kanabec spent less than 1 minute.⁹ This table also points out that the amount of time spent providing nutrition and breastfeeding education directly to participants, especially at the five local agencies, was quite limited. (App. V contains information on the percentage of staff time and the percentage of staff time costs spent on specific activities in each of the four cost categories. App. VI contains

⁹The time spent on these specific activities during our time study period at Kanabec was probably less than typically spent because the WIC coordinator attended a training course related to nutrition education, during the study, which reduced the time normally spent providing nutrition education and breastfeeding education to participants.

information on the approximate number of minutes per case-month spent on the specific activities.)

Table 4: Approximate Minutes per Case-Month Spent on Specific Nutrition Education Activities Involving Direct Contact With Participants and Percent of Total Staff Time Spent on These Activities

Nutrition education and breastfeeding promotion activity ^a	Approximate minutes per case-month and the percent of staff time					
	Gallatin	Grady	Kanabec	Long Beach	York	Zuni ^b
Providing one-on-one nutrition education or counseling	2.9	1.1	.5	2.2	.8	2.0
Providing group nutrition education	.2	<.1	0	.5	0	3.3
Providing one-on-one breastfeeding education or counseling	1.4	.8	.1	.5	.1	3.2
Providing group education breastfeeding or counseling	<.1	.1	0	<.1	0	.1
Total time spent on these specific activities^c	4.5	2.0	.6	3.3	.9	8.6
Percent of available staff time spent on these activities.	15%	8%	3%	18%	3%	12%

^aA description of each nutrition education activity can be found in app. I.

^bZuni WIC was the only state-level agency. Some staff time at Zuni WIC was spent on activities normally performed at state-level agencies, such as developing program plans and reimbursing vendors. Our time study did not distinguish between state- and local-level activities at Zuni WIC.

^cWe observed, and some staff reported to us, that some individual nutrition education and breastfeeding promotion/counseling occurred during nutrition assessment. Since nutrition assessment was considered to be a participant service activity in our time study, our results might underreport the amount of time spent on nutrition education and breastfeeding promotion and support. For example, if 25 percent of the reported time spent on nutrition assessment involved individual nutrition education or breastfeeding promotion and support, then the total time spent on these specific activities at Gallatin, Grady, Kanabec, Long Beach, York, and Zuni would be increased by 1.0, .7, .8, .4, .5, and .4 minutes, respectively.

The variation in how agencies deliver WIC services affects how much time WIC staff spend in direct contact with WIC participants. Table 5 shows the percent of staff time and minutes per case month spent on activities involving direct participant contact—in person or over the telephone. As shown in the table, the five local agencies varied widely in both the percent

of total time and the minutes per case-month spent in activities involving direct participant contact. Percent of time ranged from a high of 62.5 percent to a low of 26.9 percent and, in terms of minutes per case-month, from 19.4 to 7.0. While Zuni staff spent the most time in terms of minutes per case-month in direct contact with participants, they spent the lowest percent of total time on such activities, in large part because, as a state-level agency, Zuni WIC used some staff resources for a variety of program planning and management activities not typically performed by local agencies, such as developing and updating a state WIC plan and approving and reimbursing vendors.

Table 5: Percent of Total Staff Time and Approximate Minutes per Case-Month Spent on Activities Involving Direct Participant Contact

Agency	Percent total staff time	Approximate minutes per case-month
Gallatin	58.5	18.1
Grady	41.2	10.3
Kanabec	34.3	7.2
Long Beach	62.5	11.3
York	31.4	10.0
Zuni ^a	26.9	19.4

^aZuni WIC was the only state-level agency. Some staff time at Zuni WIC was spent on activities normally performed at state-level agencies, such as developing program plans and reimbursing vendors. Our time study did not distinguish between state- and local-level activities at Zuni WIC.

Agencies Used Nonprogram Resources to Cover Some Costs, but the Share of Costs Covered Did Not Approach the Level Cited in a 1988 USDA Study

The six agencies we studied used a variety of nonprogram resources to cover some of the costs of delivering nutrition services and administering the program. Most of the nonprogram resources we identified were in-kind contributions made by the agencies' sponsoring organizations, and some were provided by other organizations, individuals, or grants. The share of costs covered by these resources at the agencies we studied did not approach the level cited in a 1988 USDA study.

Agencies Used a Variety of Nonprogram Resources

In fiscal year 1999, the six agencies we studied used a variety of nonprogram resources to cover some costs: (1) in-kind contributions from their sponsoring organizations, (2) in-kind contributions from other organizations or individuals, and (3) grants from other organizations. Most of the nonprogram resources we identified were in the first category. Table 6 shows the categories of nonprogram resources used at each agency.

Table 6: Categories of Nonprogram Resources Used to Cover the Costs of Providing Nutrition Services and Administering the Program, Fiscal Year 1999

Agency	In-kind contributions by sponsoring organization	In-kind contributions by other organizations or individuals	Grants from other organizations
Gallatin	X	X	
Grady	X		
Kanabec	X	X	
Long Beach	X		
York	X	X	X
Zuni WIC	X	X	X

The following provides information on the nature of nonprogram resources for each category.

In-Kind Contributions by Sponsoring Organizations

Table 7 describes the major types of in-kind contributions we identified that were made by each agency’s sponsoring organization.

Table 7: Major In-kind Contributions Made by Sponsoring Organizations

Agency	Major in-kind contributions made by sponsoring organization
Gallatin	Shared space—the waiting area, examination room and classroom space for the main clinic is shared with other county programs and is provided at no cost to the program. General administrative support—utilities, administrative personnel.
Grady	Space—the space for the six clinic locations provided at no cost to the program. Indirect costs—the program was not charged for any indirect costs incurred to operate it. Personnel—the costs of some staff providing WIC services were not charged to the program. Employee benefits—some of the costs of benefits for WIC staff were not charged to the program.
Kanabec	Space—all space used by the program, including the clinic, was provided at no cost to the program. Personnel—health care staff provided some nutrition education, in conjunction with prenatal care, to WIC participants. General administrative support—supplies/materials, equipment, and administrative personnel.
Long Beach	Space—the space used at two sites was provided at no cost to the program. Indirect costs—the sponsoring organization did not charge the program for all indirect costs it incurred to operate the program. General administrative support—utilities for two sites, furniture, equipment, and translation services.
York	Indirect costs—the sponsoring organization did not charge the program for all indirect costs it incurred to operate the program. Personnel—one part-time administrative support staff provided at no cost to the program. General administrative support—furniture and supplies.
Zuni	Space—the land on which the main clinic structure—a trailer—is situated.

In-kind Contributions Made by Other Organizations

Four agencies—Gallatin, Kanabec, York, and Zuni—received contributions from other public entities and private businesses. Again, donated space was a common contribution. For instance, Gallatin, which serves not only Gallatin County but also two adjacent counties, received donated space for three of its four satellite clinics from these counties. Two public high schools in Zuni donated space for WIC staff to issue vouchers to teenage WIC mothers, while a grocer in a neighboring town provided Zuni WIC with space for the issuance of vouchers to Navajo participants. Similarly, the private landlord for York's main clinic charged the program a below-market rate for rent.

WIC agencies also received other types of in-kind contributions from public and private sources. For instance, the Grady Director indicated that its dietitians received free continuing education via teleconference courses sponsored by the Centers for Disease Control and Prevention. A local medical practice provided the waiting room furniture for York's main clinic, while a national medical supply company donated infant feeding supplies to Kanabec.

Grants

Three of the agencies, Zuni, Grady, and York, recently received small grants from public and private sources to support program services. In 1999, Zuni received a \$500 grant from a U.S. Indian Health Service diabetes prevention program to distribute toys to encourage children's physical activity. In fiscal year 1999 York WIC used \$2,000 in grant funds from the city of York to educate mothers on baby bottle tooth decay. Lastly, Grady received \$2,000 in 1998 from the March of Dimes for breastfeeding supplies and educational materials.

The Share of Costs Covered by Nonprogram Resources Did Not Approach the Level Previously Cited

The share of costs covered by nonprogram resources at the six agencies we studied did not approach the level cited by Abt Associates in its 1988 study for USDA—54 cents for every dollar in costs covered with WIC funds. For example, at Grady, where the nonprogram resources we identified covered the largest share of costs, the share of costs covered by these resources amounted to 20 cents for each dollar in costs covered with WIC funds. More specifically, the major nonprogram resources we identified at Grady in fiscal year 1999 were the sponsoring organization's in-kind contributions, which had a total value of approximately \$99,000. According to information provided by an official of the sponsoring organization, an estimated \$88,000 of this total was in the form of indirect costs incurred by the sponsoring organization that were not charged to the program and about \$4,000 was to subsidize the benefits for WIC employees. According to information provided by the WIC Director, nutrition and clerical staff support provided by the sponsoring organization was valued at about \$7,000. (The \$7,000 in salary costs for these staff was covered by other federal grant funds.) The \$99,300 in total contributions represents approximately 20 percent of Grady's 1999 WIC program expenditures, or about 20 cents for every dollar in costs covered with program funds.

We identified the following nonprogram resources at the other five agencies:

- **Long Beach.** The major nonprogram resources used in fiscal year 1998 had a total value of approximately \$333,000 and were in-kind contributions made by the sponsoring organization.¹⁰ According to information provided by an official of the agency's sponsoring organization, about \$273,000 of the amount was for indirect costs not

¹⁰Fiscal year 1998 was the most recent year for which information on the indirect costs for the WIC program was readily available.

charged to the program and \$60,000 was for the value of the space provided to the program at no charge. The estimated \$333,000 value of nonprogram resources represented about 11 percent of program expenditures in fiscal year 1998, or 11 cents for every dollar in costs covered with program funds.

- **York.** The major nonprogram resources used in fiscal year 1999 had a total value of approximately \$58,400. According to information provided by officials of the sponsoring organization, about \$36,400 of this amount was the approximate value of its in-kind contributions. About \$31,000 of this amount was for indirect costs incurred by the sponsor but not charged to the program, and about \$5,400 was for the wages of one part-time administrative staff person assigned to the program at no cost. (In both instances, the costs of the contributions made by the sponsor were covered by other federal program funds—a Community Services Block Grant and a grant from the Department of Labor.) An additional \$20,000 in nonprogram resources was, according to the WIC Director, the approximate value of the discounted lease amount the landlord charged the program for the space at the main clinic. The remaining \$2,000 was a grant from the city of York to educate mothers on baby bottle tooth decay. In total, the value of these nonprogram resources (\$58,400) represented approximately 11 percent of program expenditures in fiscal year 1999, or 11 cents for every dollar in costs covered with program funds.
- **Gallatin.** The major nonprogram resources used to cover the costs of providing nutrition services and administering the program in fiscal year 1999 were in-kind contributions by both the sponsoring and other organizations. The sponsoring organization estimated the value of the in-kind contributions of shared space and support from administrative personnel to be \$10,720. The program also received donated space for three of its four satellite clinics from Madison and Park counties. The WIC Director estimated the value of space contributed by these adjacent counties was about \$1,200 per year. The combined total value for the major in-kind contributions, \$11,920, represented about 8 percent of Gallatin's WIC program expenditures in fiscal year 1999, or about 8 cents for every dollar in costs covered by program funds.
- **Kanabec.** The major nonprogram resources in fiscal year 1999 used to cover program costs had a value of \$3,000. According to a sponsoring agency official, in-kind contributions were made by the sponsoring organization of dedicated space for the WIC office, use of equipment,

and support from health care staff. The \$3,000 represented about 6 percent of program expenditures, or about 6 cents for every dollar in costs covered by program funds.

- **Zuni.** The major nonprogram resources Zuni WIC used to cover program costs in fiscal year 1999 had a value of about \$5,500. According to an official of the sponsoring agency, \$5,000 was in the form of an in-kind contribution of rent-free land on which the WIC facility was located. In addition, the WIC program received a \$500 Indian Health Service grant to distribute toys to improve children's physical activity. The \$5,500 represented about 2 percent of Zuni WIC's program expenditures in fiscal year 1999, or about 2 cents for every dollar in costs covered by program funds.

Agency Comments

We provided a draft of this report to USDA's Food and Nutrition Service for review and comment. We met with Food and Nutrition Service officials, including the Director of the Grants Management Division. The agency officials generally agreed with the information presented in this report. They provided some technical comments, which we incorporated as appropriate. We also provided the case study agencies, their sponsoring organizations, and the state-level WIC agencies with the opportunity to review a draft of those sections of the report pertaining to their operation. These organizations provided us with a number of technical corrections, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees; interested Members of Congress; the Honorable Dan Glickman, Secretary of Agriculture; and other interested parties. We will also make copies available upon request.

If you or your staff have any questions about this report, please contact me or Thomas E. Slomba at (202) 512-5138. Key contributors to this report are listed in appendix VII.

A handwritten signature in black ink that reads "Robert Robertson". The signature is written in a cursive style with a large, prominent initial "R".

Robert E. Robertson
Associate Director, Food and
Agriculture Issues

Scope and Methodology

This report provides information on the (1) approaches WIC agencies use to deliver nutrition services and administer the program; (2) way staff at WIC agencies allocate their time delivering nutrition services and administering the program; and (3) types of nonprogram resources used by WIC agencies and the extent to which such resources are used to cover the costs of delivering nutrition services.

To address these issues, we conducted case studies at six judgmentally selected WIC agencies. The case study approach enabled us to provide detailed information on agency procedures and operations. The case studies are not intended to be a statistically valid sample. Consequently, our observations and results are not generalizable to all WIC agencies.

In judgmentally selecting individual case study agencies, we sought to identify a set of case studies that represented a wide range of agency characteristics. Towards that end, we considered over a dozen agency characteristics, including WIC enrollment levels, type of sponsoring agency, geographic location, rural versus urban operating environments, frequency of food instrument issuance, racial/ethnic diversity, and poverty levels. The six WIC agencies selected included five local agencies: Gallatin WIC in Montana; Grady WIC in Atlanta, Georgia; Kanabec WIC in Minnesota; Long Beach WIC in California; and York WIC in Pennsylvania; and one Indian tribal organization, Zuni WIC, in New Mexico, which functions as both a state- and local-level WIC agency.

To determine how nutrition services and administration activities are performed at each of the case study agencies, we conducted on-site interviews with WIC agency management and staff as well as with officials and staff of the respective sponsoring organizations and state WIC agencies. Interviews were conducted using a standardized interview guide. During our site visits, which ranged from 4 to 5 days in length, we observed staff perform the various nutrition services and administrative activities, including individual and group nutrition education sessions. We also gathered and reviewed pertinent documents, including agency policies, staff rosters, clinic schedules, and financial and budget documents. After our on-site visits, we followed-up as necessary with agency, state, and sponsoring organization officials to obtain additional information as needed. We did not evaluate whether the local agencies followed state and/or federal WIC or grant management guidelines.

To determine the amount of time that the WIC staff spent performing various activities, we conducted time studies at each of agencies. To

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develop the activity categories used in our time studies we reviewed Food and Nutrition Service (FNS) documentation, recent WIC research and examples of WIC time studies from several states in order to identify and categorize the nutrition services and administration (NSA) activities to track during the time study. Table 8 lists the activity categories and subcategories that we monitored in our review.

Table 8: Description of WIC Activity Categories Used for Time Studies at Six Case Study Agencies

WIC activity category	Description of activities in each activity subcategory
Participant services	
Scheduling participants ^a	Scheduling appointments, providing phone or in-person reminders, following up on missed appointments, and rescheduling.
Determining participants' eligibility ^a	Determining eligibility (income, category, residence); obtaining necessary documentation and copying it; completing forms or computer screens; having support staff obtain anthropometrics and blood work for the purpose of determining eligibility; obtaining and recording immunization data; handling complaints.
Assessing participants' nutritional risk ^a	Having competent professional authorities ^b obtain physical measurements, such as height and weight, and bloodwork for the purpose of assessing risk or intervention level, completing assessments and tests, determining appropriate risk factors, assessing immunization status, completing forms or computer screens, discussing nutrition and breastfeeding, developing a care plan, developing a food package, reviewing charts and filing, entering progress notes.
Making referrals and following up ^a	Assisting participants in obtaining other health or social services (such as public health services, immunizations, Medicaid, food stamps, and voter registration) or transferring to another WIC agency.
Explaining benefits and procedures to participants ^a	Explaining WIC procedures, rights and benefits.
Issuing food benefits ^a	Issuing checks or vouchers, training participants in using vouchers in a store, voiding vouchers.
Providing or receiving training or other professional development	Training staff or volunteers or receiving training in procedures for certification, eligibility, scheduling, WIC client benefits and rights, and client services; reading related professional materials; attending or holding workshops, meetings, and conferences. Professional development refers to time spent by WIC staff either receiving training, or in providing training to other WIC support staff (such as peer counselors, volunteers, clerical staff) on WIC procedures, policy or related technical issues.
Making record notations	Making chart notations after client has left clinic: completing or revising nutritional notes, care plan, or other participant information.
Nutrition education	
Providing one-on-one nutrition education or counseling ^a	Providing a one-on-one counseling/education session that occurs outside of certification/recertification process, explaining WIC foods and food preparation, following up, and documenting meetings. Includes phone calls and visits to, for example, the home or a hospital.
Providing group nutrition education ^a	Providing group counseling/education sessions.

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WIC activity category	Description of activities in each activity subcategory
Developing educational materials	Researching, developing, ordering, and reviewing materials; planning and conducting activities, sending out mailings.
Consulting with medical providers regarding nutrition education of individual participants	Communicating with medical providers regarding the nutrition education of individual participants. Includes phone calls, mailings, visits, meetings, and in-services.
Providing or receiving training or other professional development	Reading professional materials, attending workshops and other meetings; developing and presenting in-services; training other staff or volunteers.
Monitoring and evaluating nutrition education activities	Monitoring and evaluating nutrition education activities; compiling and analyzing data; revising policies and procedures.
Breastfeeding promotion and support	
Providing one-on-one breastfeeding instruction/counseling ^a	Providing a one-on-one breastfeeding counseling/education session that occurs outside of certification/recertification process.
Providing group breastfeeding instruction/counseling ^a	Providing group breastfeeding counseling/education.
Developing breastfeeding promotion materials	Researching, developing, ordering, and reviewing materials; planning and conducting activities (e.g., incentive awards), mailings.
Consulting with medical providers regarding breastfeeding issues	Communicating with medical providers regarding breastfeeding promotion and support or coordination of services. Includes phone calls, mailings, home visits, hospital or medical center visits, meetings, and in-services.
Providing or receiving training or other professional development	Reading professional materials, attending workshops or other meetings; developing and presenting in-services, training peer counselors or volunteers.
Monitoring and evaluating breastfeeding promotion activities	Monitoring and evaluating breastfeeding promotion and support activities and breastfeeding rates; compiling and analyzing data; revising policies and procedures.
Administration	
Outreach to potential participants ^a	Providing WIC information to potential participants.
Outreach to health care providers and other organizations	All communication (such as phone, meetings, and mailings) with health care providers, social service agencies, schools, public officials, and others; encouraging referrals to the WIC program; nutrition education or breast feeding promotion; developing and distributing outreach materials; arranging for advertising or notification; developing or conducting demonstrations.
Clerical tasks	Filing, photocopying, ordering supplies and equipment; purchasing, renting or repairing equipment; handling correspondence and data entry; setting up the clinic; assigning space for group sessions, maintaining state or local licenses, bondage or insurance; maintaining voucher issuance records; maintaining lists of authorized vendors; voiding vouchers; inventorying vouchers; printing vouchers; and maintaining voucher stock.
Travel	Preparing for travel—such as loading equipment; traveling to clinics or other-WIC related destinations; preparing travel expense reports; and checking on airfares, hotels, and other travel needs.
Personnel tasks	Completing timesheets; processing payroll; hiring and terminating staff; orientating new personnel; supervising staff; non-WIC staff training.
Accounting and finance	Processing invoices, preparing reports; developing and reviewing budgets; auditing.
Vendor management	Training vendors; responding to complaints; conducting on-site visits; monitoring; disqualifying vendors; corresponding with vendors; maintaining vendor records; authorizing vendors.

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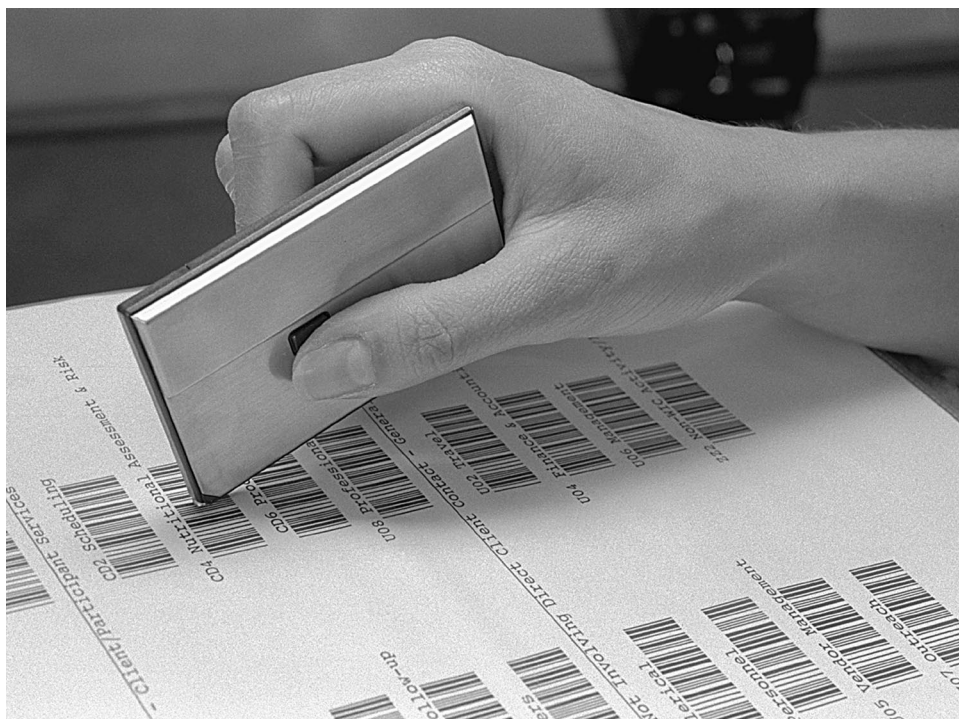
WIC activity category	Description of activities in each activity subcategory
Management	Attending staff meetings; conducting general evaluation of WIC activities; developing policies and procedures; reviewing reports; scheduling clinic operations.
Organize self/work	Setting priorities for the day's work; turning computers on/off; organizing desk at end of day.
Miscellaneous	Time spent on WIC related activity that did not fit under other defined activity.

^aActivity involved direct contact with participant, or in the case of outreach with potential participants, either in person or by telephone.

^bA competent professional authority is, according to program regulations, an individual on the staff of a local agency who is authorized to determine nutritional risk and prescribe supplemental foods. Individuals who can be designated as a CPA include nutritionists, dietitians, nurses, and medically trained health officials.

We used two techniques to record and summarize the amounts of time individual staff spent on these various activity categories. At five agencies we employed a contractor, Work Management Institute, Ltd. of Arlington, Virginia, which had developed a recording system utilizing bar code technology. Rather than having WIC agency staff manually record how they spent their time using traditional timesheets, the bar code technology allowed participating staff to sweep a credit-card size bar code scanner over specific bar codes as they began each activity throughout the day (see fig. 3). The technology and associated procedures were intended not only to ease the WIC staffs' data entry burden but also to increase the accuracy of the data. The contractor provided training to the staff and subsequent monitoring to ensure that the bar code procedures were followed properly. Each evening, the data were uploaded to the contractor who collated and analyzed the data. The contractor provided reports to each staff member the next day for verification. We used the bar code technology to conduct a 1-month (20 to 22 workdays) time study at five of the WIC case study agencies: Gallatin, Grady, Kanabec, York, and Zuni.

Figure 3: Bar Code Scanner and Sheet Used in Time Study



We did not use the bar code technology for the sixth case study—Long Beach—because of the increased costs associated with deploying the system for the significantly larger number of staff located at the agency. Instead we used a paper-and-pencil timesheet approach, which incorporated many of the features of the bar code approach. Specifically, Long Beach staff used the same activity coding system as the agencies using the bar code technology, and agency staff members received on-site training from GAO staff members. WIC staff recorded on timesheets how they spent their time 1-day a week, over a 5-week period. The days for time-use recording were pre-assigned, so that staff recorded their times once on each day of the week (i.e., once on a Monday, once on a Tuesday). In addition, on any given day approximately one-fifth of the staff recorded time use. If a staff member could not record times on the assigned day, GAO assigned a substitute day. Complete data (5 days) were obtained for 51 of the 53 staff members. The recording sheet of each staff member was reviewed once it was received, and any problems or concerns about the way times were recorded were discussed with the staff member. Table 9 shows the time span of each of the six time studies.

Table 9: Time Span of Time Study for Each Agency

Agency	Time span of time study
Gallatin	October 10, 1999 through November 17, 1999
Grady	February 28, 2000 through April 3, 2000
Kanabec	October 25, 1999 through November 22, 1999
Long Beach	January 18, 2000 through February 18, 2000
York	March 13, 2000 through April 12, 2000
Zuni	February 10, 2000 through March 16, 2000

To arrive at the minutes per case-month spent on an activity category at an agency, we multiplied the percent of all time staff time spent on a given activity category by the approximate number of minutes of staff time, including that of administrative and support staff, available to perform all nutrition services and administrative activities. To arrive at the approximate number of minutes available for all nutrition services and administrative activities for each agency, we (1) calculated the number of full-time equivalent staff at each agency at the time of our study; (2) divided the agency's average monthly participation for fiscal year 1999 by the number of full-time equivalent staff to arrive at an approximation of the number of participants served per full-time equivalent staff; (3) assumed each full-time equivalent staff had approximately 1,920 hours available each year and divided 1,920 by the number of participants served per full-time equivalent staff to arrive at the number of hours of staff time available per participant per year; (4) divided the number of hours available per year by 12 and converted the result to minutes to arrive at the approximate number of minutes available per participant per month—referred to as per case-month.

To calculate the percent of staff time costs spent on the various activity categories we used the loaded hourly wage rate (pay plus benefits) for employees at all agencies except Long Beach where we used the unloaded hourly wage rate (benefits not included). The time an individual staff member spent on an activity category was multiplied by that individual's wage rate. The sum of staff costs for an activity category and the sum of costs for all activity categories were used to calculate the percentage of staff time costs for each activity category.

Finally, to determine the types of nonprogram resources and the extent to which agencies used such resources to cover costs, we requested detailed

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information during our interviews with officials of the WIC agencies and their sponsoring officials regarding all nonprogram resources used to provide WIC services. We then worked with the officials to establish a value for each of the major nonprogram resources used, relying where possible on records such as existing indirect cost allocation plans.

Selected Characteristics of the Six Case Study Agencies

This appendix presents five tables on selected characteristics of the case study agencies.

Table 10 shows the characteristics of the six case study agencies in terms of sponsoring organization, and geographic areas served, and average monthly number of participants served in fiscal year 1999.

Table 10: Characteristics of Case Study Agencies in Terms of Sponsoring Agency, Geographic Area Served, and Average Monthly Number Of Participants Served

Agency	Sponsoring organization	Geographic area served	Average monthly participation, fiscal year 1999
Gallatin ^a	Single county health agency	Rural	1,018
Grady	Public hospital	Urban	4,852
Kanabec	Single county health agency	Rural	313
Long Beach	City health department	Urban	28,452
York	Community action agency	Urban	4,859
Zuni	Indian tribal organization	Rural	857

^aGallatin is operated by a single county but provides nutrition services to three counties.

Table 11 compares the characteristics of the five local case study agencies with those of local agencies nationwide. The characteristics of the local agencies are based on information provided by 1,416 local WIC agencies that responded to a nationwide survey we conducted in 1999.¹

¹We conducted the survey for our report entitled *Food Assistance: Financial Information on WIC Nutrition Services and Administrative Costs* (GAO/RCED-00-66, Mar. 6, 2000). That report contains a description of the survey methodology.

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Table 11: Characteristics of Five Local Case Study Agencies Compared With Local WIC Agencies Nationwide

Agency setting	Percent of local agencies nationwide	Case study agency
State health agency	3	
District health agency	7.6	
Multicounty health agency	8.6	
Single county health agency	40.6	Kanabec, Gallatin ^a
Municipal health agency	2.9	Long Beach
Community health agency	15.7	
Community action agency	7.3	York
Indian health agency	2.3	
Public hospital	3.5	Grady
Private voluntary hospital	1.8	
Private proprietary hospital	0.6	
Other	5.3	
Geographic service area		
Urban	24.3	Long Beach, Grady, York
Suburban	7.6	
Rural	56.1	Gallatin, Kanabec
Mixed	10.5	
Average monthly caseload		
500 or less	19.8	Kanabec
501-999	15.7	
1,000—2,499	26.5	Gallatin
2,500—4,999	17.7	Grady, York
5,000—9,999	11.4	
10,000 or more	8.2	Long Beach
Unknown	0.6	

^aGallatin is operated by a single county but provides nutrition services to three counties

Table 12 shows the number of full-time equivalent staff and the participant-to-staff ratio at the time of our study.

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Table 12: Selected Staffing Statistics for Each Case Study Agency

Agency	Number of full-time equivalent staff	Number of registered dietitians on staff	Number of registered nurses on staff	Participants per staff
Gallatin	3.3	1	0	308
Grady	12.8	8	0	381
Kanabec	.7	0	1	460
Long Beach	52.2	16	0	545
York	16.3	0	2	300
Zuni	6.6	1	0	134

Table 13 shows the amount of WIC program resources the six agencies used to provide nutrition services and administer the program in fiscal year 1999. These expenditures are expressed as expenditures per participant per month. The variation among the agencies is due in large part to the amount of funding per case-month that flows from USDA to the state-level WIC agencies, and from these state-level agencies to the local agencies.

Table 13: Six Agencies' Expenditures of WIC Program Funds, Fiscal Year 1999

Agency	Expenditure per participant per month
Gallatin	\$12.54
Kanabec	\$8.09
Long Beach	\$8.43
Grady	\$8.37
York	\$9.47
Zuni	\$25.71

Notes: The WIC program expenditures refer to the local agency expenditure of federal and, in the case of Kanabec, federal and state WIC program funds. The per-participant per case-month expenditures for the five local agencies do not include program expenditures made at the state level. Some state-level expenditures directly support local agency operations. The expenditures for Zuni WIC, the only state-level agency, include both state-and local-level expenditures.

Table 14 shows the percent of WIC program funds expended on personnel, space, indirect costs, and all other costs for each of the six agencies in fiscal year 1999.

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Table 14: Six Agencies' Percent Distribution of WIC Program by Budget Category, Fiscal year 1999

Budget category	Gallatin	Grady	Kanabec	Long Beach	York	Zuni^a
Personnel and benefits, excluding expenditures for contracted personnel	79%	96%	89%	50%	84%	68%
Contracted personnel	0	0	0	26	0	0
Facilities and related expenses	7	0	2	7	8	2
Equipment and supplies	3	4	2	2	1	4
Indirect	4	0	6	5	4	14
All others	7	<1	1	10	3	12
Total	100%	100%	100%	100%	100%	100%

^a Zuni WIC was the only state-level agency. Some Zuni WIC expenditures were for state-level costs.

Additional Comparisons of the Ways the Six Agencies Deliver Nutrition Services and Administer the Program

This appendix provides additional comparisons of agencies' approaches in areas of participant services, nutrition education, breastfeeding promotion, and program administration.

Participant Services

- **Managing participants' waiting time.** The six agencies used a variety of strategies to try to schedule participants' appointments, thus affecting the amount of time participants waited to be seen. For example, Gallatin and Kanabec saw their participants in the order of their scheduled appointment times, and participants typically waited 5 to 10 minutes for service. In contrast, while Long Beach scheduled most appointments, participants were seen on a "first-come, first-served" basis, regardless of whether or not they had an appointment; under this system, participants experienced waiting times of about 30 minutes.
- **Handling missed appointments.** The agencies used various strategies to deal with the problem of missed appointments. At two agencies—Kanabec and York—staff routinely called participants to remind them of upcoming appointments but did not call them if they had missed appointments. In contrast, Grady, Gallatin, and Zuni only made follow-up phone calls or sent post cards to participants who missed an appointment. Long Beach uses an automated telephone calling system to make recorded calls to remind participants of upcoming appointments and to remind them to reschedule a missed appointment.
- **Referring participants to other service providers.** The agencies varied somewhat in how they referred participants to other service providers, but no agency consistently followed up on whether participants had acted on the referral. Participants may be referred to a variety of health and social service providers, such as the public health nurse for immunizations or the Medicaid or food stamp offices. In particular, for referrals to public health providers, three agencies—Gallatin, Kanabec, and Zuni—used a referral form. For other types of referrals at these three agencies and for all referrals at the other three agencies, staff typically provided participants with information orally and in written form, such as a brochure or printed list that identified the provider or providers of the needed service. At all of the agencies but Long Beach, staff noted the referral in the participant's record.

Nutrition Education

- **Content of instruction.** The six agencies most often provided nutrition education to adult participants or caregivers through one-on-one discussions. The information provided during these sessions varied considerably. We observed that the content of these initial discussions ranged from a few general sentences to in-depth explanations and medical nutritional counseling.¹
- **Other methods used to provide nutrition education.** The agencies varied in the extent to which they used strategies, other than one-on-one sessions or classes, to provide nutrition education. For example, Zuni, which had a kitchen in its facility, was the only agency to incorporate cooking demonstrations into group sessions. All the agencies also used brochures and other education material to provide general nutrition information. At Zuni, participants were asked to study a display and answer questions that they reviewed with WIC staff. Videotapes on nutrition were typically played in waiting rooms at Long Beach, York,² and Zuni.
- **Tailoring nutrition education to meet participants' language needs.** Several agencies tailored the nutrition education they provided to meet the language needs of specific groups of participants. For instance, four agencies—Long Beach, Zuni, Grady, and York—operated in ethnically diverse communities and hired bilingual staff to provide nutrition education to non-English speaking participants. Long Beach staff developed its own brochures to serve its Cambodian population. In contrast, the Grady Director told us that the program lacked funding for nutrition education materials in languages to serve some segments of the agency's participant population.

Breastfeeding Promotion and Support

- **Content of breastfeeding one-on-one sessions.** As with nutrition education, the content and the duration of the breastfeeding counseling ranged from a brief exchange about whether a woman intended to breastfeed to a 45-minute breastfeeding appointment.

¹Medical nutrition counseling addresses medical nutrition issues such as gestational diabetes. Gallatin, Kanabec, Long Beach, and Zuni referred participants who needed medical nutrition counseling to non-WIC dietitians.

² During our visit the York videotape machine was out of order.

- **Using other strategies to promote breastfeeding.** In order to sustain breastfeeding once the mothers are at home, three agencies—Kanabec, Grady, and Zuni—offered telephone support to mothers calling with questions or concerns. To make breastfeeding convenient while mothers were visiting WIC offices, two agencies—Long Beach and Zuni—dedicated private space for this purpose. In addition, staff from three agencies, Zuni, Gallatin, and Long Beach, committed their local WIC funding or time volunteered by staff to develop breastfeeding promotion material—videos and brochures—for use not only by their own agency but also for other agencies in their area.

Administration

- **Conducting outreach.** Outreach generally includes those activities undertaken to attract eligible participants and to ensure that they continue to receive the benefits to which they are entitled. All of the agencies but Grady described distributing WIC materials to area medical providers, community groups, or social service providers, and at area health fairs. Several agencies mentioned that they distributed material to area schools and/or the Head Start program. The Kanabec WIC Director indicated that participants also typically heard about the WIC program through friends and family. The Gallatin WIC Director said that the effectiveness of the agency's outreach was limited because staff were not trained in outreach strategies, and the agency lacked the resources to provide such training. Grady WIC conducted minimal outreach because it did not have a defined service area and did not want to take participants from neighboring WIC agencies. Outreach activities were confined to the WIC caseload, hospital-based patients, and hospital-sponsored events, such as an open house meant to inform expectant mothers on available hospital services.

Detailed Summaries of the Six Case Studies

This appendix provides a detailed summary of each of the six case study agencies. It includes an overview of the state-level WIC program and describes the geographic area served by the agency, the sponsoring organization, staffing, clinic operations, the approaches used to deliver major nutrition services and administer the program, and the nature of nonprogram resources used to provide WIC services.

Gallatin County, Montana, WIC Program

Overview of the Montana State WIC Program

The Gallatin County WIC program is one of 43 local agencies providing WIC services in Montana. In fiscal year 1999, the average monthly number of participants served by these 43 agencies was 21,346. According to our 1999 national survey of local WIC agencies, most of these agencies operate in rural settings and over half are run by a single county public health agency.¹

In fiscal year 1999, the Montana WIC program expended federal Nutrition Services and Administration (NSA) grant funds totaling \$4,178,202, or about \$16.31 per participant per month (per case-month). Montana provided no state funds for WIC nutrition services and administration. About 24 percent of the NSA expenditures (\$986,655) was made at the state level. The remaining 76 percent (\$3,211,547) was expended by the local agencies. Montana distributes WIC program funds to local agencies on the basis of served caseload bands, or “per capita funding.” The funding allocation is based on the average of actual participants served in the most recent 6 or 12 months of participation, whichever is greater. For example, in fiscal year 1998, Gallatin WIC received \$180 per participant per year for the first 100 participants, \$139 per participant per year for the next 101 to 500 participants, and \$133 per participant above 500.

The Montana WIC program supports the local agencies by providing a statewide participant database system, which became fully operational in 1995. The state conducts a nightly upload of the participant certification data from the local agencies’ computers. The statewide automated system

¹ We conducted the survey for our report entitled *Food Assistance: Financial Information on WIC Nutrition Services and Administrative Costs* (GAO/RCED-00-66, Mar. 6, 2000). This report describes the survey methodology.

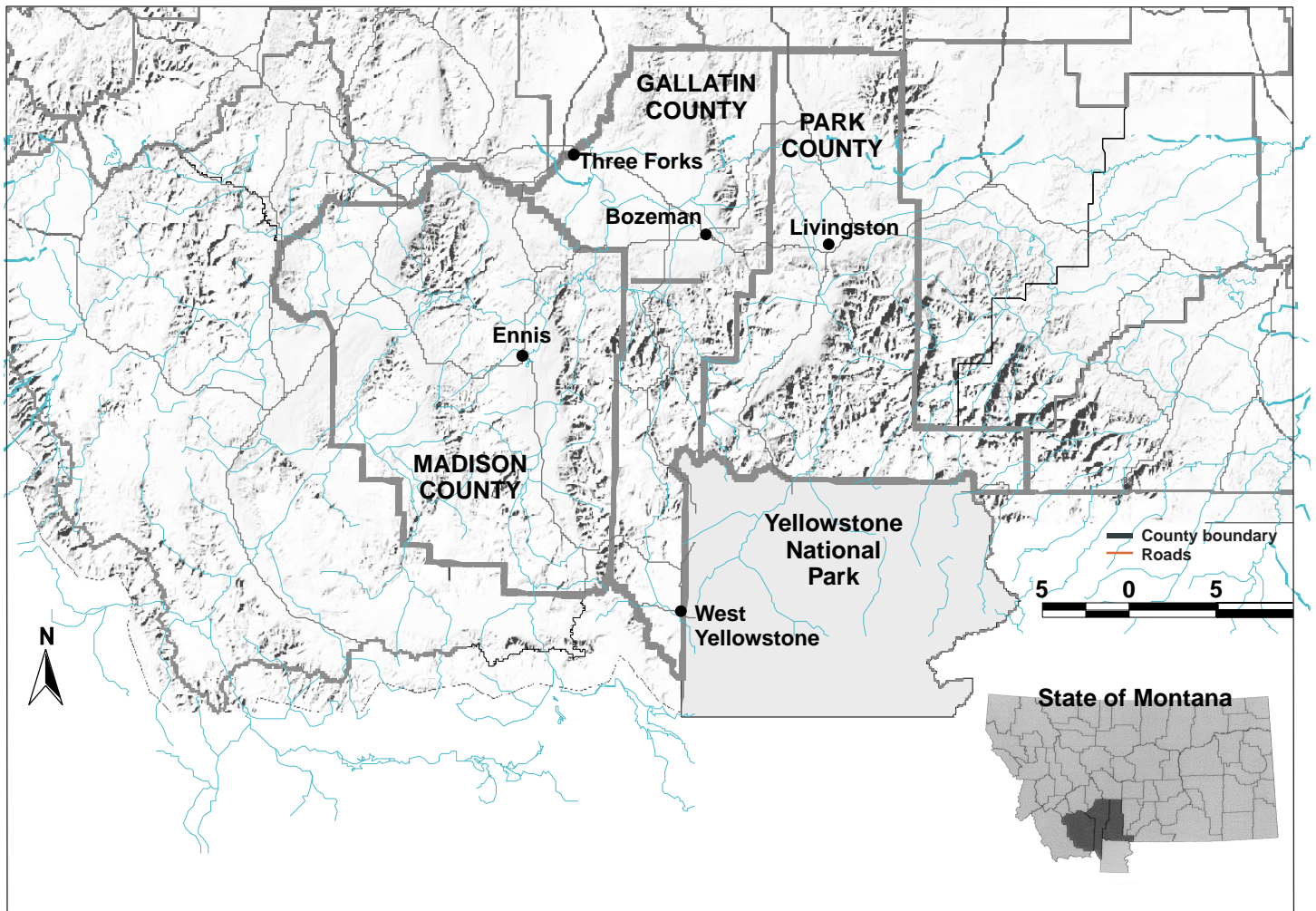
is used to schedule appointments and collect and record information obtained during participant certification and recertification, including nutrition risk assessments. It is also used to create custom food packages, calculate the value of each food package or food check, and print food checks on demand. Local agency staff can also use laptop computers to print food checks on demand at satellite clinics.

The Montana WIC program also supports the local agencies by providing program guidance; nutrition and breastfeeding materials, training; peer training on breastfeeding; travel and lodging needed to attend training; equipment purchases, such as blood-testing equipment and supplies; automated data processing equipment and support, including three toll-free 800 telephone numbers for technical support.

**Characteristics of the
Geographic Area Served by
the Gallatin County WIC
Program**

The Gallatin County WIC program is located in Bozeman, Montana, and serves the residents of Gallatin, Park, and Madison counties. The population in Gallatin County grew over 2 percent in just 1 year, from 61,196 in 1997 to an estimated 62,545 in 1998. Bozeman is the fifth largest city in the state, with an estimated population of 29,936 in 1998. It is situated in southwestern Montana, in a large valley surrounded by rugged mountains. The climate varies with the elevation. Higher elevations bring lower temperatures and higher snowfalls that can make travel difficult at times. Figure 4 shows the topography of the tri-county area served by Gallatin WIC.

Figure 4: Topography of the Three County Area Served By Gallatin WIC and the Satellite Clinic Locations.



Source: Gallatin City-County Health Department, Bozeman, MT.

In 1993 about 13 percent of Gallatin County's population was at or below the poverty level. The recent population growth has made Bozeman more expensive to live in, and as a result, low-income individuals and families have moved farther from the town's center. Gallatin County is predominantly white, with minorities (African-Americans, American Indians, Eskimos and Aleuts, Asian/Pacific Islanders, and Hispanics) representing 3.7 percent of the total population in 1996.

Local Agency's Program Characteristics

Sponsoring Organization

Gallatin WIC has operated under the auspices of the Gallatin City-County Health Department, a single county health agency, since 1976. In addition to the WIC program, the Health Department operates adult and child immunization clinics, a school nursing program, a well-child clinic, a breastfeeding support and education program, and the Maternal/Child Health Home Visitation program. The Department provides an integrated service model that provides “one-stop-shopping” for those seeking health services in Gallatin County.

The county charges the WIC program for indirect costs such as accounting, data processing, and personnel. Total indirect costs charged to the WIC program are based on cost allocation among the various programs. In fiscal year 1999 the program was charged for indirect costs that represented 3.9 percent of program expenditures. The health department provides WIC with in-kind contributions of shared space for a waiting room, a classroom, storage space, and an examination room used by the main clinic, as well as utilities and support from administrative personnel.

WIC Clinics

The main Gallatin WIC clinic is in Bozeman and is collocated with the other Gallatin health department programs. At the time of our study, the normal hours for the main clinic were Monday through Friday, 8:00 a.m. to 5:00 p.m. Gallatin WIC offered limited extended hours at the main clinic— evening hours on three to four Wednesdays per month and during the lunch hour on Tuesdays. In July 1999, over 700 of the 1,045 Gallatin WIC participants were receiving services at this clinic.

To make services more convenient for participants with limited transportation, Gallatin WIC opened four additional sites—Three Forks and West Yellowstone in Gallatin County, Ennis in Madison County and Livingston in Park County (see fig. 4). The distance from the main site in Bozeman to the satellite sites ranges from 28 to 90 miles. The farthest three satellite clinics are located on the other side of mountain ranges. The satellite sites all share space with other public or health agencies—Three Forks in the City Hall, Livingston and Ennis in public health clinics, and West Yellowstone in a community services building. Services at Livingston are provided every Friday and two Wednesdays and one Saturday per month; at Ennis, Three Forks, and West Yellowstone, services are provided one day a month and a second consecutive day at West Yellowstone, if

needed. In July 1999, the satellite clinics served between 28 and 202 participants.

Staffing

At the time of our study, Gallatin WIC had four staff—three of whom worked part-time—for a total of 3.3 full-time equivalent staff. The WIC Director is a registered dietitian who has been with the program since 1988. She has the only full-time, salaried position. The three part-time employees were all competent professional authorities (CPAs)² with bachelor degrees in home economics. Gallatin had no support staff—the service staff carried out support activities.

Number of Participants Served

The Gallatin County WIC program, which served a monthly average of 990 participants in fiscal year 1998, is one of the largest local WIC agencies in the state. In fiscal year 1999, the monthly average participation had grown to 1,018. Table 15 shows the number of participants by category served in September 1998 and July 1999. In April 2000, 64 percent of the participants being served were considered to be high-risk.

Table 15: Number of Gallatin Participants by Category, September 1998 and July 1999

Participant category	Number of participants	
	September 1998	July 1999
Pregnant women	107	122
Breastfeeding women	97	82
Postpartum women not breastfeeding	52	49
Infants	252	246
Children	478	548
Total	986	1,047

Montana State University students represent about 30 to 40 percent of the agency’s participants, but this figure fluctuates throughout the academic

² A competent professional authority (CPA), according to program regulations, is an individual on the staff of a local agency who is authorized to determine nutritional risk and prescribe supplemental foods. Individuals who can be designated as a CPA include nutritionists, dietitians, nurses, and medically trained health officials.

year. Participation also fluctuates because the West Yellowstone satellite clinic serves transient seasonal service workers.

Major Aspects of the Program's Delivery of Nutrition Services and Administration

Participant Services

During the certification appointments, Gallatin WIC staff routinely measured participants for growth and tested their blood for anemia. Growth was also measured during recertification and other appointments. Staff reported, and we observed, that some nutrition education and breastfeeding promotion and support was also provided during the nutrition assessment process. CPAs and the dietitian saw both high- and low-risk participants. In accordance with Montana WIC guidance, Gallatin developed individual care plans for both high- and low-risk participants. The program used individual care plans to monitor education contacts, track when the participant attended an appointment, record the topic addressed, and evaluate the participant's progress. The care plan was kept in hard copy in the participant's record, and some information on the participant was entered into the automated system.

Potential participants were strongly encouraged to schedule a certification appointment after an initial telephone or walk-in contact. In addition to documents such as identification and proof of income, caregivers were advised to bring immunization records for child participants. If an applicant did not have the required documentation, as much of the appointment was completed as possible and another appointment was scheduled to complete the certification and issue checks. Participants were generally seen by appointment, unless time was available in the schedule to see them on a walk-in basis. The WIC Director estimated that if participants were not seen immediately, the waiting time to be seen was about 5 to 10 minutes. Initial nutrition education appointments typically lasted over 45 minutes. If a participant missed an appointment, the staff routinely made a follow-up call to reschedule. The program has a policy of scheduling monthly appointments for food check pick-ups to coincide with a nutrition/breastfeeding education contact. The WIC Director implemented this policy in 1988 because she believed simultaneous appointments made better use of participants' time at the WIC office. Table 16 shows the frequency of check issuance for various types of participants.

Table 16: Frequency of Check Issuance by Participant Type at Gallatin WIC

Type of participant	Frequency of check issuance
Pregnant women	Monthly
Postpartum women	Monthly first 4 months, then every 2 months
Infants	Monthly first 4 months, then every 2 months
Children—high-risk	Every 2 months
Children—low-risk	Every 3 months

The state requires Gallatin staff to refer participants to the appropriate health care provider or agency as needed or requested by a participant. The state also requires documentation of the need for the referral and information on the person to whom the participant was referred and on the outcome of the referral. Gallatin WIC has established a formal system using a pre-printed referral form that is filled out by WIC staff and sent to the Gallatin City-County Health Department, Human Services Division for Public Health, Pregnancy Services, and the Follow-me Program, as appropriate. This formal approach enables Gallatin WIC to track whether the participant was seen and to confer with the nurse. Staff also documented the child participant’s immunization status and made immunization referrals. Immunization appointments were coordinated with WIC appointments at all sites but Three Forks.

Gallatin WIC staff did not use a formal system when referring participants to other providers, such as substance abuse programs and La Leche League but rather simply provided a listing of providers with the necessary contact information. A list of the social services available in the county was also provided in the packet that the participants received at certification. If the Gallatin WIC staff refers the participant to a provider within the building, such as another county health department program, they will sometimes escort the participant to that office. In addition, referrals are made when the staff are unable to provide certain services, such as home visits, which may be provided by a county public health nurse.

Regarding voter registration, the staff had voter registration cards on the WIC office desks, but they did not ask the participants whether they had registered.

Nutrition Education

Nutrition education was typically provided in one-on-one sessions with participants during certification, recertification, and check pick-up

appointments. One-on-one nutrition education discussions began during the nutrition assessment phase of the certification process, when the CPA provided feedback on the participant's reported diet. For instance, during one recertification appointment, the WIC Director explained to a mother that her toddler was drinking twice as much milk in a day as he needed and that by drinking less milk he might be able to eat more meat. The certification and recertification appointments that we observed lasted from between 25 minutes to over 1 hour. Staff handed out brochures to supplement their nutrition education discussions, and the agency displayed posters illustrating general nutrition information, such as the Food Pyramid. The content of these individual discussions focused on the individual's dietary needs and included in-depth explanations, such as describing the benefits of different vitamins and ways to identify vegetables that were good sources of particular vitamins, and strategies to improve their diet, such as moderating a child's intake of juice to avoid unnecessary calories. However, in accordance with the state WIC policy, the WIC Director referred participants who needed medical nutrition counseling to the registered dietitian at the local hospital. In addition, the Gallatin WIC Director indicated that funding constraints limited the amount of time staff had to spend with participants. For instance, she reported that, over the past 2 years, the program had to schedule the staff for fewer days per month because of budget constraints. The Director also indicated that staff time or the space was not available to provide formal nutrition education to the child participants. She reported that the older children were frequently given coloring sheets with food subjects, and the WIC staff then discussed the sheet with the child. Two other strategies the program uses to provide nutrition education to participants were the following:

- Holding monthly scheduled video sessions on a variety of nutrition and related topics. These topics include breastfeeding, infant care and development, menu planning, food selection storage and safety, infant and child feeding behaviors, and parenting; and
- Sending participants to 45-minute monthly classes offered by the WIC program and by the public health nurses in the health department. The WIC staff taught classes every other week on the topics of prenatal nutrition, infant feeding, and breastfeeding/postpartum nutrition, and, twice a month, on starting your baby on solid foods. These classes were offered at all the WIC clinics. The public health nurses teach classes monthly on breastfeeding; infant care; the toddler years—nutrition, behavior, and discipline; pregnancy—fetal growth/development, nutrition, and healthy lifestyle; and labor and delivery. The classes

taught by the public health nurses are offered monthly and were developed in collaboration with the WIC program.

Breastfeeding Promotion and Support

Gallatin's WIC Director also served as the breastfeeding coordinator, although all of the staff received breastfeeding training. The agency's policy was to encourage all mothers to try breastfeeding at least once. This effort was made in one-on-one sessions with pregnant women; during the prenatal nutrition and monthly breastfeeding classes; in videos; and through promotional materials, including infant feeding review and infant nutrition questionnaires. The Gallatin Director developed breastfeeding promotion and other WIC-related brochures for use not only by her own agency but also by the rest of the state.

In 1998, the program had a breastfeeding initiation rate of 83 percent.³ In 1998, the breastfeeding initiation rate for the state of Montana was 73 percent.

Administration

Maintaining participants' records. The statewide automated system is used to schedule appointments, collect and record information obtained during participant certification and recertification, including nutrition risk assessments, create custom food packages, calculate the value of each food package or food check and print food checks on demand. While a substantial amount of participant and program data is maintained on the system, individual hard-copy participant records were also maintained.

Managing vendors. Gallatin WIC staff played little role in vendor selection and compliance activities because these were handled by the state WIC agency. The staff's involvement in vendor management was typically limited to vendor training and monitoring, such as referring any problems that came to their attention to the state agency.

Outreach. Gallatin WIC is primarily responsible for running outreach campaigns at the local level. It has conducted outreach to the following: the annual Head Start carnival; local school officials; area physicians; a homeless service provider (in Bozeman, a shelter is in the planning stage); other social service providers; and professional groups. The program provided notices or advertisements in local newspapers, television public service announcements, radio public service announcements, display

³ The percentage of breastfed infants may be inflated because the infants whose style of feeding has not been identified are averaged into the breastfeeding average.

booths or tables at community fairs; mailed program literature to interested persons; and encouraged referrals by participants. The Director indicated that effective outreach requires specialized training that the local agencies do not have and lack the money or time to acquire.

Travel. All of the Gallatin staff traveled to the four satellite clinics to provide services. Travel to some clinics, across mountain ranges, can be difficult, especially in winter, when roads close because of bad weather.

Retaining and recruiting personnel. The WIC Director reported having some problems maintaining an adequate staffing level. She believed the state WIC's policy prohibiting medical nutrition counseling served as a disincentive to prospective applicants who were registered dietitians.

Expenditures of Program Funds and Use of Nonprogram Resources

Gallatin's expenditures per participant per month in fiscal year 1999 was \$12.54. Table 17 shows the fiscal year 1998 and 1999 program expenditures the agency made by category.

Table 17: Gallatin WIC Program Expenditures by Category, Fiscal Years 1998 and 1999

Category	Fiscal Year 1998		Fiscal Year 1999	
	Amount	Percent of total	Amount	Percent of total
Personnel and benefits excluding expenditures for contracted personnel	\$118,789.56	77%	\$121,404.93	79%
Contracted personnel	380.00	0%	105.12	0%
Equipment and supplies	19,596.25	13%	5,327.10	3%
Facilities and related expenses including utilities, maintenance, rent and telephone	9,268.86	6%	10,604.09	7%
Indirect costs	5,280.00	3%	5,757.50	4%
All other	0	0%	10,017.16	7%
Total	\$153,314.67	100%	\$153,215.90	100%

Note: Percents may not total to 100 percent due to rounding.

The major nonprogram resources used to cover the costs of providing nutrition services and administering the program were in-kind contributions by both the sponsoring organization and the government agencies in Madison and Park counties. The Health Officer for Gallatin County estimated the value of the in-kind contributions of shared space

and support from administrative personnel to be \$10,720. The program also received donated space for three of its four satellite clinics from Madison and Park counties. The WIC Director estimated that the value of space contributed by these counties to be about \$1,200 per year. The combined total value for the in-kind contributions, \$11,920, represents about 8 percent of Gallatin's WIC program expenditures in fiscal year 1999, or about 8 cents for every dollar in costs covered by program funds.

Other minor in-kind contributions from other public or health agencies include utilities, furniture, and equipment. We did not obtain an estimate for the value of these contributions.

Grady WIC, Atlanta, Georgia

Overview of the Georgia State WIC Program

Grady WIC is one of 21 local agencies providing WIC services in Georgia. In fiscal year 1999, the average monthly number of participants served by these 21 agencies was 224,031. The local agencies ranged in size from 1,488 to 17,346 participants in an average month. According to Georgia WIC officials, 19 of the 21 WIC agencies are administered by district health officials and 2 are administered by hospitals. Of the 15 Georgia local agencies that responded to our 1999 national survey of local WIC agencies, 7 operated in rural settings, 3 in urban areas, 2 in suburban areas, and 3 in mixed geographic settings.

In fiscal year 1999, the Georgia WIC program expended \$30,839,839 in federal NSA grant funds, or about \$11.47 per participant per month. According to state WIC officials, Georgia provided no appropriated funds for WIC nutrition services and administration. About 16.5 percent of the NSA expenditures (\$5,080,115) were made at the state level, and the remaining 83.5 percent (\$25,759,724) at the local agency level. In fiscal year 1999, Georgia distributed WIC program funds to local agencies on the basis of a flat calculation of yearly cost per participant per month. Funding was allocated to local agencies twice a year. In fiscal year 1999, the per participant per month cost was \$8.55.

The Georgia WIC began automating recordkeeping of participant data by local agencies in 1991. The state agency staff can provide the local agencies with both standard and customized reports. Local agency program staff can

call state computer staff for assistance with issues such as installing hardware and software, and maintenance. State WIC computer staff will also travel to the local agency to resolve system problems. In February 2000, a state WIC official reported that the local agencies used five separate automated systems, in addition to the system developed by the state program. The local agency systems are not integrated with each other, but each can interact with the third-party data processor. Grady WIC and two other local agencies use one of the five local agency systems—Grady since 1992. Grady WIC's system has the capability to enroll participants and issue food instruments. It operates in real time and has the capability to print both standard and customized reports. Grady WIC's participant data are uploaded to the state's third party processor system and a voucher printing contractor on a daily basis. According to a state WIC official, Grady's system is scheduled to be upgraded during 2000 to print vouchers on demand.

Other types of support the Georgia state WIC agency provided to local agencies included general program policy as well as nutrition education and breastfeeding guidance and materials, and vendor management.

Characteristics of the Geographic Area Served by the Grady WIC Program

The Grady WIC program is located in Atlanta, Georgia's capital and the government seat of Fulton County. Atlanta is mostly in Fulton County, with about 8 percent of its population in DeKalb County. Grady WIC provides services to residents from throughout Georgia, although its service area primarily overlaps with Fulton and DeKalb counties' WIC agencies. Fulton County had a total population of about 722,540 in 1997, and in 1999, Atlanta had a population of 431,126.

According to 1993 Census data, 23 percent of all Fulton County residents lived below the poverty level. In 1999, 67.8 percent of Atlanta's population was nonwhite. In November 1999, about 61 percent of the Grady WIC participants were African-American; 37 percent, Hispanic; and 2 percent, other. The WIC Director estimated that about one-third of Grady WIC participants do not speak English as their primary language. Grady WIC staff reported a high incidence of obesity among the population they serve.

Local Agency's Program Characteristics

Sponsoring Organization

Since 1983, the Grady WIC program has operated under the auspices of the Fulton-DeKalb Hospital Authority. The authority is responsible for administering the Grady Health System (GHS), which includes Grady Memorial Hospital, Hughes Spalding Children's Hospital, a nursing facility, various health and trauma centers, and a managed care organization. Grady Memorial Hospital, a public, nonprofit hospital, aims to provide healthcare services for medically underserved and indigent citizens in the community. The Grady WIC program is located within the hospital's Maternal Child Health Nutrition Department. As one of the two contract WIC agencies in Georgia operated by hospitals, Grady WIC can enroll participants in its program or in any of the other WIC programs in the state.

GHS provides the WIC program with several types of in-kind contributions. First, GHS does not charge the WIC program for any indirect or space costs associated with operating the program. Second, the system provides the WIC program with some clerical and staff support. Lastly, GHS partially pays for the benefits for WIC staff—the WIC program was charged 17.5 percent of personnel salaries for employees' benefits, although the actual cost for the benefits was 18.6 percent.

WIC Clinics

To make services more convenient to participants with limited transportation, Grady WIC operated, at the time of our study, a total of six clinics located in GHS-operated facilities in Atlanta. The WIC maternal and infant clinics are collocated with Grady Hospital. The pediatric WIC clinic is located in the children's hospital (see fig. 5), two blocks from Grady Hospital. Another clinic, Lindbergh, is collocated with a health clinic in a shopping center, about 6 miles from Grady Hospital. It is Grady WIC's largest clinic, serving 1,403 participants in January 2000. Another clinic is located at a facility dedicated to HIV patients, and one clinic, Boat Rock, was in a health center in a low-income residential building, about 15 miles from Grady Hospital. In January 2000, the clinics served between 116 and 1,403 participants. The Boat Rock clinic was closed in April 2000 because the health center closed.

Figure 5: Grady WIC Pediatric Clinic



At the time of our study, five of the satellite clinics were open Monday through Friday, with hours of operation starting between 8 a.m. and 9 a.m. and closing between 4 p.m. and 5 p.m. The Boat Rock clinic was only open on Tuesdays and Thursdays. On Wednesdays, the Lindbergh clinic operated from 10 a.m. to 6:30 p.m.

Staffing

At the time of our study, Grady WIC had 16 staff: seven worked full-time for WIC, and 9 worked part-time for WIC and part-time for other hospital programs. This equated to 12.8 full-time equivalent staff. The WIC Director at the time of our study had been with the program for about 7 years and was a registered dietitian who had coauthored several research papers on nutrition education and breastfeeding. The 10 CPAs on staff consisted of 8 registered dietitians and 2 nutritionists. A CPA was in charge of each of the six clinics. The CPAs conducted eligibility certifications, obtained health measurements, provided nutrition education and breastfeeding promotion and support, maintained logs of nutrition education, and monitored participants' nutrition education statistics. Two of the five clerks at the agency also provided informal breastfeeding counseling and support. Five of the staff were bilingual.

Number of Participants Served

In fiscal year 1999, Grady WIC’s average monthly caseload was 4,852. Table 18 shows the number of participants by category served in January 2000. The WIC Director estimated that 90 to 95 percent of the participants served were from the metropolitan Atlanta area. Approximately 79 percent of the participants served in November 1999 were considered to be high-risk.

From April 1999 to October 1999, according to the WIC Director, the caseload dropped significantly, by almost 400 participants. The Director attributed this decrease to a new requirement that applicants document their family income and residency.⁴

Table 18: Number of Grady WIC Participants by Category, September 1998 and November 2000

Participant category	Number of participants	
	September 1998	November 2000
Pregnant women	1,473	1,052
Breastfeeding women	256	207
Postpartum women not breastfeeding	415	392
Infants	1,457	1,360
Children	1,398	1,323
Total	4,999	4,334

Major Aspects of the Program’s Delivery of Nutrition Services and Administration

Participant Services

During certification or recertification sessions, Grady CPAs will most often measure the participant’s height and weight and test blood for anemia, according to the WIC Director. However, if a new participant had recently been admitted to the hospital or if a participant had just delivered a baby in the hospital, WIC staff will have access to the participant’s hospital chart,

⁴USDA regulations require documentation of family income for individuals not participating in a qualifying program, such as the Food Stamp Program or Medicaid.

which will have the needed information. Grady's computer system can also access the hospital's laboratory results database; if a patient has recently been seen, staff can get blood test results from the database instead of doing another blood test. While staff could occasionally save time in assessing participants, the Director indicated recent program changes had increased the time and the number of forms required to certify participants.

For the initial assessment, both the dietitians and nutritionists saw participants considered to be at high-risk. An individual care plan—developed for all high-risk participants—was used to record the physical information obtained during assessment. For example, in the case of a child participant, this information would include whether the child had been immunized, the nutrition topics discussed, the handouts provided, and the notations regarding follow-up activities. The care plan was kept in the participant's WIC record, and some information on the participant was entered into the automated system.

All participants were typically issued vouchers on a bimonthly basis. The Grady WIC clinics made appointments and accepted walk-ins for voucher pick-up, and certification and recertification sessions. All of the satellite clinics attempted to coordinate the WIC recertification appointments with the participants' other medical appointments. At the time of our study, Grady WIC was short-staffed, and therefore the clerks did not have time to contact participants who missed appointments. When the clerks had time, they made follow-up calls or sent post-cards to such participants. In February 2000, the WIC Director estimated that about 10 percent of participants missed their appointments.

In accordance with state guidelines, during certification and recertification sessions, Grady WIC staff asked if child participants were current on immunizations and recorded the information provided by the caregiver. However, staff were not required to ask for documentation of immunization status. In making referrals to other service providers, staff typically provided the participant with the telephone number of the provider or a booklet describing Atlanta area service providers. However, when making referrals for health service within the hospital, staff reported that, depending on the seriousness of the situation, they sometimes escorted participants to service providers. Typically, Grady WIC staff did not refer participants to non-WIC staff to address any nutrition education or breastfeeding issues. Staff recorded some referral information in the participant data system and attempted to follow up with participants at the next scheduled appointment regarding the outcome of the referral.

Regarding voter registration, according to the WIC Director, staff will inquire if adult participants are registered to vote. If not, staff will provide participants with the registration paperwork and help them fill it out if necessary. The program does not track whether participants have been asked about voter registration.

Nutrition Education

According to the WIC Director, although the agency used several different methods to provide nutrition education, the primary method was one-on-one counseling during certification, recertification, and voucher pick-up appointments. The certification and recertification appointments that we observed lasted from 10 to 40 minutes. Grady WIC staff did not differentiate between nutrition education and counseling but provided little extensive counseling. The topics discussed during a nutrition education or counseling sessions depended on a participant's particular needs. For instance, we observed a one-on-one session in which staff explained to a father who reported giving his obese 6-month-old baby soft drinks that plain water was a better choice.

High-risk participants are typically allotted 10 minutes for a nutrition education session, according to the WIC Director. Because of a staff shortage, the nutrition education for low-risk participants typically consisted of providing a nutrition brochure or having them watch a video. The Director indicated that although a daily nutrition education class was scheduled at the maternal WIC clinic, it was often not held because participants would not come in at the designated class times.

Grady WIC also provided nutrition education via brochures, videotapes, group sessions or a touch screen computer kiosk. The touch screen computer kiosk, which the state provided, was located at the maternal clinic. It offered a self-paced narrated program to educate the participant on how the WIC program works and to discuss various nutrition education and breastfeeding issues. Grady WIC also displayed a few posters illustrating general nutrition information at some of the clinics.

To serve its multilingual population, Grady WIC offered materials and classes in English and Spanish and some written materials in other languages. However, the WIC Director said that the program did not have funding for enough nutrition education materials translated into other languages. She also said that Grady did not have nutrition education classes geared toward the child participants because it did not have sufficient space or staff.

In response to the need of some WIC participants for more nutrition education than could be provided by the WIC program, GHS' Maternal and Child Health Nutrition Department received federal funding from two other programs providing nutrition services that benefited many WIC participants. The Department's support to the prenatal, obstetric, and HIV clinics is funded by two Department of Health and Human Services (HHS) grants. Since so many of the high-risk maternity and infant patients are eligible for WIC services, the WIC dietitians and the HHS-funded dietitians closely coordinated their efforts to provide this supplemental education. The Grady WIC Director indicated that the loss of these complementary services would significantly affect the demands placed on WIC staff and thus the quality of WIC's nutritional services.

Breastfeeding Promotion and Support

Grady WIC promotes breastfeeding through classes, support groups, telephone contacts and on-call services. All pregnant participants received breastfeeding information at certification. The WIC breastfeeding coordinator was a focal point and resource for breastfeeding information in Grady Hospital. For instance, she provided in-service training to the hospital's health professionals. The coordinator and two CPAs, were also certified lactation consultants. The coordinator spent the largest portion of her time providing one-on-one breastfeeding assistance to WIC participants who were in the hospital. One of the lactation consultants taught a breastfeeding class in Spanish twice a month and in English twice a week, as well as a teen breastfeeding class once or twice a month. In addition to visits conducted by the coordinator, a WIC nutritionist visited the maternity ward daily. The program also trained and utilized volunteer breastfeeding peer counselors, who conducted the telephone contacts and met with participants in the WIC clinics.

Grady had one of the highest breastfeeding initiation rates in the Georgia WIC program, about 57 percent for fiscal year 1998. However, because of funding constraints, Grady had fewer staff to provide individual breastfeeding counseling and follow-up than it had in the past. Consequently, the breastfeeding coordinator had observed a decrease in the initiation rate; in January 2000, the rate was 50 percent.

Administration

Maintaining participants' records. Grady WIC used a local database system that created a participant record and tracked participant data. The local system printed the first set of vouchers at certification. Grady's participant data were uploaded daily to the state's third party data processor and a state printing contractor. The state's printing contractor sent preprinted vouchers to Grady for issuance to participants at

subsequent appointments. The staff documented information such as the participant's diet, nutrition risk factors, and physical measurements on paper. Because they rely on preprinted vouchers rather than printing vouchers on demand, Grady staff need time to enter and download participant data to a state contractor, and they had to void and reconcile preprinted vouchers when participants did not pick them up. Although Grady's participant data system generated various reports, staff often took data off the system and generated reports using off-the-shelf software because the system did not perform the kind of data analysis needed.

Managing vendors. Unlike the other local WIC agencies in Georgia, Grady played little role in vendor management activities because it was located at a hospital. Instead, vendor activities were typically limited to referring any problems that came to the staff's attention to the state WIC agency.

Outreach. According to the WIC Director, Grady WIC conducted minimal outreach because it did not have a defined service area and did not want to take participants from neighboring WIC agencies. Outreach activities were confined to the WIC caseload, hospital-based patients, and hospital-sponsored events, such as an open house meant to inform expectant mothers about available hospital services. Grady WIC had recently experienced a decrease in caseload. The WIC Director attributed this decrease to recent program changes, which she believed made qualifying for the WIC program more difficult. Given the decrease in caseload, the short-term outreach goal was to maintain and increase caseload.

Travel. The staff normally did not travel from site to site to provide services. Travel expenses were provided for attending conferences and training.

Retaining and recruiting personnel. Because of level funding over the last 3 years, the WIC Director reported that Grady had recently eliminated two positions, a part-time nutritionist and a lactation assistant, and had three unfilled positions, for one nutritionist and two support staff. She indicated that hiring personnel takes 5 to 6 months because the hospital human resources office is short-staffed and procedures are slow. The eliminated nutritionist position provided on-call support to participants, while the lactation assistant supported breastfeeding promotion. Because the program was short one nutritionist, the Director had pulled the designated lactation consultant from her breastfeeding promotion and support duties in order to certify eligible participants. The reassignment of the consultant and the elimination of the lactation assistant position had

resulted in Grady's reducing its breastfeeding promotion and support efforts. In addition, the Director reported that management and nutritionists had to spend more time in clinics performing clerical duties, leaving little time for professional development, consultations, and chart notations. To cover vacancies in the clerical positions, the remaining clerks were working overtime on a regular basis.

Expenditures of Program Funds and Use of Nonprogram Resources

Table 19 shows the fiscal years 1998 and 1999 program expenditures the agency made by category. In fiscal year 1999, the expenditure per participant per month was \$8.37. Ninety-six percent of Grady's expenditures were for personnel. In fiscal years 1998 and 1999, Grady expended no program funds for space or indirect costs.

Table 19: Grady WIC Program Expenditures by Category, Fiscal Years 1998 and 1999

Category	Fiscal year 1998		Fiscal year 1999	
	Amount	Percent of total	Amount	Percent of total
Personnel and benefits excluding expenditures for contracted personnel	\$453,365	92%	\$467,205	96%
Equipment and supplies	31,530	6%	17,993	4%
Facilities and related expenses including utilities, maintenance, rent and telephone	0	0%	0	0%
Indirect costs	0	0%	0	0%
All other	5,393	1%	1,989	<1%
Total	\$490,288	100%	\$487,187	100%

Note: Percents do not total to 100 due to rounding.

The major nonprogram resources used by the program were in-kind contributions to cover all of the indirect costs incurred to operate the program, some nutrition and clerical staff support, and to subsidize a portion of the costs to provide benefits to WIC staff. According to information provided by a sponsoring agency official, the indirect costs GHS incurs to operate the program—including the space provided at no charge—would be about 18 percent of program expenditures, or about \$88,000 in fiscal year 1999. The WIC Director reported that the value of the GHS-provided nutrition and clerical staff support to be about \$7,000. In

addition, the sponsoring organization subsidized WIC employee benefits in 1999 for a total of about \$4,000. Taken together, these contributions (amounting to about \$99,000) represented about 20 percent of program expenditures, or about 20 cents for every dollar in costs covered with program funds.

In addition to the nonprogram resources provided by the sponsoring organization, Grady received a small grant (\$2,000) from the March of Dimes in fiscal year 1998 for breastfeeding supplies and educational materials, and WIC dietitians received free continuing education via monthly teleconferences on nutrition issues provided by the Centers for Disease Control.

Kanabec County, Minnesota, WIC Program

Overview of the Minnesota State WIC Program

Kanabec County's WIC program is one of 70 local agencies providing WIC services in Minnesota. In fiscal year 1999, the average monthly participation at these agencies was 90,200. According to our 1999 national survey of local WIC agencies, these local agencies averaged between 35 to 18,309 participants monthly in fiscal year 1998. Over half of the Minnesota local agencies responding to our survey were operated by single county health agencies, and over three-quarters operated in rural areas.

In fiscal year 1999, the state WIC program expended federal NSA grant funds totaling \$13,064,382, or about \$12.07 per participant per month. Since 1987, the state has also provided funding of about \$3.7 million per year. In fiscal years 1998 and 1999 all the state funds were used for grants to local agencies. In fiscal year 1999, the amount of state funds expended for nutrition services and administration was \$3,999,906, bringing the total expended (federal and state funds) for nutrition services and administration to \$17,064,287. (Statewide, state funds covered about 31 cents in NSA costs for every dollar in costs covered with federal funds). About 39 percent of the total NSA expenditures, or \$6,681,038, was made at the state level. The remaining 61 percent, or \$10,343,249, in expenditures was made by the local WIC agencies. Minnesota distributes WIC program funds to local agencies on the basis of a cost per participant that is the

same for all local agencies. In fiscal year 1999, the rate was \$8.74 per participant. The state agency has a mechanism to recover and reallocate unspent funds on a quarterly basis. The state Director noted that another source of funding for some local agencies are the local tax revenues that the sponsoring agencies allocate to the program to cover NSA costs not covered by state or federal funding. She estimated that in 1999 local sponsoring agencies, statewide, contributed about \$300,000 to local WIC agencies.

Minnesota's WIC participant database system was fully automated in 1998. It is used to record and track participant information, generate predefined reports, and issue vouchers on demand. The state uploads the participant certification data from the local agencies' computers. At the time of our study, the state's ability to print reports was limited because the system could not search by specific data fields and run reports, such as a report on all participants by birth date. The state anticipates the system will have that capability in the future. Local agency program staff can obtain assistance with equipment maintenance, reports, and other questions via the state-funded WIC help desk.

The state WIC program provides most of the training for local agency employees, including introductory sessions on basic WIC operations and conferences on nutrition education and breastfeeding promotion and support, and other program functions. The state WIC program provides one basic training class for new local agency staff. This training focuses on basic WIC program operations, such as certification and the use of the computer system, and nutrition education. In addition, the state WIC program holds an annual conference on nutrition education and breastfeeding promotion and administration; the conference offers training on issues such as working with the computer system, voucher issuance, and policy changes. The state WIC agency also funds operational and nutrition consultants to provide technical assistance to local agencies in the consultants' assigned geographic areas. Other types of support the state agency provides to local agencies include nutrition and breastfeeding materials, voucher stock, and statewide multimedia campaigns.

Characteristics of the Geographic Area Served by Kanabec County WIC Program

The Kanabec County WIC program is located in Mora, Minnesota, and serves residents of Kanabec County, which had a population of about 14,000 in 1999. Mora is a small rural town with a population of about 3,100 in 1999, located approximately 60 miles north of Minneapolis. The area's terrain is flat and forested and contains several lakes. Snowfall during

December and January averages about 10 inches a month, which can sometimes make travel difficult.

Although the county's unemployment rate is low, a significant portion of its residents are poor. Kanabec County is the fifth poorest county in the state. In 1997, about 19 percent of its children were estimated to live in poverty, and the estimated average annual unemployment rate was 7.7 percent. In addition, between 1995 and 1997, Kanabec County's birthrate for teenagers ages 18 and 19 was over twice that of the rest of Minnesota. The county's population is predominantly white, with an estimated minority population of 1.3 percent (African-Americans, American Indians, Eskimos and Aleuts, and Asian/Pacific Islanders).

Local Agency's Program Characteristics

Sponsoring Organization

The Kanabec County WIC program is sponsored by a single county health agency—the Kanabec County Public Health Department. Established in 1976, the WIC program operates in conjunction with other health department programs, such as those providing health check-ups, family planning, meals, and other community services. Agency officials consider the WIC program part of an integrated care management approach to public health. For example, WIC participants often stop to see the public health nurse and obtain their immunizations before going to the WIC office.

The department charges the WIC program for indirect costs, such as services provided by the sponsoring organization's auditor and treasurer. In fiscal year 1999, the indirect costs charged the program were based on a cost allocation plan. The Department provides WIC with in-kind contributions, including dedicated space for the WIC office; the use of equipment; and support from health care staff, who provided some nutrition education, in conjunction with pre-natal care, to WIC participants.

WIC Clinics

The program provided all WIC services at one location, the Kanabec County Health Department building in Mora. Normal hours of operation were Tuesday through Thursday, 8:00 a.m. to 4:00 p.m. The clinic was open during lunch hours and stayed open later than normal hours, if needed. Mondays were reserved for other WIC duties. All of the WIC operations are conducted in the coordinator's office. (See fig. 6.) Participants typically waited in the hallway outside of the office for their appointment. On

occasion, participants could view videotapes in the adjoining team room. Although Kanabec did not have satellite clinics, it did offer, on request, free or reduced-cost transportation to WIC participants.

Figure 6: Kanabec WIC Clinic



Staffing

At the time of our study, the program employed one part-time staff member—a registered nurse—who serves as the WIC coordinator and is the CPA. (This is equivalent to a staff of .7 full time employees.) The WIC Coordinator was responsible for daily nutrition services and administration activities. Staff of the sponsoring organization provide minimal administrative or management support. (Another county nurse was

certified to issue vouchers if the WIC Coordinator was unavailable.) The WIC Coordinator has been a registered nurse for 28 years and has been with the program for 5 years. She is paid on an hourly basis.

Number of Participants Served

The Kanabec WIC is one of the smallest local agencies in the state. In fiscal year 1998, it served a monthly average of 300 participants, and in fiscal year 1999, a monthly average of 313 participants. Table 20 shows the number of participants by category served in September 1998 and September 1999. According to data from the state WIC agency, approximately 54 percent of the Kanabec participants in October 1999 were considered high-risk.

Table 20: Number of Kanabec County Participants by Category, September 1998 and September 1999

Participant category	Number of participants in:	
	September 1998	September 1999
Pregnant women	6	20
Breastfeeding women	11	16
Postpartum women not breastfeeding	50	30
Infants	24	73
Children	253	187
Total	344	326

Major Aspects of the Program's Delivery of Nutrition Services and Administration

Participant Services

During the certification or recertification session, the Coordinator routinely measured participants' height and weight and tested blood for anemia. If a participant was pregnant, she was asked to prospectively fill out the infant feeding survey indicating whether or not she planned to breastfeed. The WIC coordinator typically developed individual care plans for both low- and high-risk participants. The care plan specified behavior-related goals, the nutrition education provided, and documentation of follow-up visits.

Potential participants were typically scheduled for a certification session after pre-screening for eligibility. If the Coordinator determined that the applicant was eligible for WIC benefits, she scheduled the applicant for an appointment and either sent or gave the forms to the applicant. Kanabec had a policy of scheduling separate appointments for certification and voucher pick-ups to manage the daily flow of participants and keep waiting times to 5 to 10 minutes. It was not common for participants to be seen on a walk-in basis. Because only the Coordinator handles certifications and other appointments, she scheduled 6 to 8 days per month for certification and 8 days a month for voucher pick-up. For other days, she scheduled appointments with participants who required more of her time, such as those with more in-depth nutritional needs. She attempted to schedule WIC appointments for participants who also participated in the Maternal Child and Health Program to coincide with appointments for that program. The Coordinator routinely called participants to remind them of upcoming appointments.

In response to the loss of clerical support, the Coordinator decided to change the monthly flow of participants by changing voucher issuance for low-risk participants to every 3 months. According to the WIC coordinator, tri-monthly issuance of vouchers provided some benefits to participants by reducing the amount of travel to the clinic, which is especially important during bad winter weather. This, in turn, has decreased the number of broken appointments. Vouchers were issued to high-risk participants monthly or bimonthly. The Coordinator typically did not call participants to follow up on missed appointments.

Kanabec WIC made referrals on an as-needed basis. As required by the state, the Coordinator fills out forms when making health care referrals. The referrals to the county maternal child and health nurse were also tracked manually. Every 6 months the Coordinator asked whether the child participant had received the proper immunizations. If the child needed immunizations, she referred the child to the public health nurse and coordinated the WIC appointment with the immunization appointment. Kanabec did not use a form when referring participants to other providers, such as social services, but rather provided a listing of providers with the necessary contact information. If applicants were not eligible for the WIC program, the coordinator referred them to a community food program. Although the community food program did not offer nutrition education, it did provide children and mothers with extra food for up to 1 year. The WIC Coordinator will typically follow up on the outcome of a referral to the county public health nurse. With regard to voter registration, the

Coordinator had the voter registration cards visible in the office, but did not ask the participants whether they had registered.

Nutrition Education

Nutrition education was typically provided during 15- to 20-minute one-on-one sessions during certification, recertification, and voucher pick-up appointments. The certification appointment that we observed lasted about 30 minutes. The Coordinator reported, and we observed, that some nutrition education and breastfeeding promotion and support were also provided during the nutrition assessment process when the Coordinator provided feedback on the participant's reported diet. The contents of individual nutrition education sessions were tailored in response to such information as diet, weight, and height. For instance, she explained to the mother of a formula-fed newborn that the baby did not need to be given water, juice or any other food. The Coordinator assessed the participant's diet and weekly food intake record to determine the areas for focus during counseling. She referred participants needing medical nutrition counseling to the registered dietitian at local hospital. She also provided brochures to supplement the nutrition education discussions, and the agency displayed posters illustrating general nutrition information. In addition, nutrition education was delivered via promotional displays, newsletters, and videotapes. The WIC Coordinator generally directed the discussion to the caregiver, although she would sometimes ask children what they ate.

Since the staff of the sponsoring public health agency carries out most program management responsibilities, the WIC Coordinator could spend more time providing nutrition services. However, she indicated that the agency did not have sufficient resources to carry out the program's nutrition education requirements. For instance, she had not provided group counseling sessions since she assumed additional administrative tasks following the loss of a part-time clerk and had to spend time automating the certification process.

Breastfeeding Promotion and Support

The WIC Coordinator, who is also the breastfeeding coordinator, provides breastfeeding promotion and support services, usually in one-on-one counseling, to both pre-natal and postpartum mothers, during certification, recertification, or voucher pick-up appointments. In addition, the Coordinator distributes breastfeeding promotional materials and provides space at the clinic for breastfeeding, if needed. Although the Coordinator has received breastfeeding training, she is not a certified lactation consultant. The nearest consultant, who works for another local WIC agency, is approximately 30 miles away. The content of breastfeeding counseling includes the advantages, myths about, and barriers to

breastfeeding, such as the barriers mothers face when returning to work. In particular, the coordinator will review the survey that she gives to all of the prenatal mothers and use the responses as a basis for discussion. In order to sustain the mother's breastfeeding, the Kanabec Coordinator followed up on the status of the mother's breastfeeding during the next appointment or, if she had time, called.

In August 1999, Kanabec WIC had a breastfeeding initiation rate of 35.1 percent and 8.5 percent for infants about 3 to 6 months old. The sponsoring agency official noted that this percentage can vary greatly from month to month because of the small number of participants overall. In December 1999, Minnesota WIC reported a breastfeeding initiation rate of over 57 percent statewide.

Program Administration

Maintaining participants' records. Until a computer system was installed in May 1998, the WIC Coordinator collected and maintained all of the participant information by hand. Kanabec WIC now maintains participant information in both the computer and in paper files. At the time of our study, the computer system collected all the information to certify and recertify participants, evaluated the information to determine eligibility, set the nutritional risk level for the participants, and printed vouchers. Information still maintained in paper records included participants' responses to standard questions regarding infant feeding and participants' diet, and notations of the nutrition education provided. The Coordinator could also use the system to generate a few simple reports. More sophisticated reports required the help of skilled state employees.

Managing vendors. Kanabec reported having little or no role in vendor management. The WIC Coordinator tried to resolve the few vendor or participant complaints that she received each year.

Outreach. The Kanabec WIC coordinator conducted outreach by distributing WIC brochures at the hospital and annual county fairs, as well as to local organizations that serve the homeless and to local community groups. Participants also typically heard about the WIC program through friends and family, from other social service programs, and from the local family planning clinic collocated with the WIC agency.

Travel. The Coordinator did not have to travel to provide nutrition services to participants. Travel expenditures were made for trips to state conferences or training.

Retaining and recruiting personnel. The WIC coordinator reported having some problems maintaining an adequate staffing level. As a result of a cut in funding, Kanabec reduced the scheduled hours for its clerk, who subsequently resigned in May 1999, in part, because of the reduction in hours. After this resignation, the WIC Coordinator took on some of the clerical duties, leaving less time for nutrition education and counseling.

Expenditures of Program Funds and Use of Nonprogram Resources

Table 21 shows the agency's fiscal years 1998 and 1999 program expenditures by category.

Table 21: Kanabec County WIC Program Expenditures by Category, Fiscal Years 1998 and 1999

Category	Fiscal year 1998		Fiscal year 1999	
	Amount	Percent of total	Amount	Percent of total
Personnel and benefits excluding expenditures for contracted personnel	\$35,279.07	89%	\$27,006.30	89%
Contracted personnel	0	0%	0	0%
Equipment and supplies	500.28	1%	601.35	2%
Facilities and related expenses including utilities, maintenance, rent and telephone	970.11	2%	568.27	2%
Indirect costs	2,211.99	6%	1,866.15	6%
All other	762.09	2%	346.82	1%
Total	\$39,723.54	100%	\$30,388.89	100%

Kanabec's program expenditures include both federal and state WIC program funds. Its expenditure per participant per month in fiscal year 1999 was \$8.09.

The program's major nonprogram resources were in-kind contributions from the sponsoring organization of dedicated space for the WIC office, the use of equipment, and support from health care staff. The county health official estimated the value of these contributions to be \$3,000 for fiscal year 1999. This represented about 6 percent of program expenditures, or about 6 cents for every dollar in costs covered by program funds.

In addition, staff from the sponsoring organization spent up to several hours a month providing general administrative support to Kanabec WIC.

Other minor support from the sponsoring organization, not covered by indirect costs, were supplies and materials. In addition, a national medical supply company donated infant feeding supplies. No estimate was available of the value of these additional nonprogram resources.

Long Beach, California, WIC Program

Overview of the California State WIC Program

Long Beach WIC is one of 83 local agencies providing WIC services in California. In fiscal year 1999, the average monthly number of participants served by these local agencies was 1,229,495. According to our 1999 national survey of local WIC agencies, the local WIC agencies in California range in size from about 400 to 307,000 average monthly participants. Of the 67 California local WIC agencies that responded to our survey, 25 operated in urban settings, 20 in rural settings, 10 in suburban settings, and 12 in mixed geographic settings.

In fiscal year 1999, the California WIC program expended about \$170,805,225 in federal NSA grant funds, or about \$11.58 per participant per month. California provided no state funds for nutrition services and administration. About 25 percent of NSA expenditures, or \$43,101,972, were made at the state level. Of this amount, about three-quarters was used for state-level operations and about one-quarter was used for costs associated with providing state support to local agencies, primarily for operating the state's case management information system and for purchasing the nutrition education materials provided to local agencies. The remaining \$127,703,253, or 75 percent, of California's WIC expenditures was made by the local WIC agencies. California distributes funds to local agencies using a formula that results in smaller agencies receiving more per participant per month than larger agencies. The formula has two elements: (1) a base allocation that depends on an agency's caseload and (2) a per participant per month cost rate.

The California WIC program implemented its statewide integrated automated participant and vendor information system in 1995. The computer system is an on-line real-time system. Once local agency employees log onto it, they have immediate access to all information, restricted only by their level of clearance. Local agency staff enter information obtained from participants during certification and follow-up

meetings. They use the system to calculate income eligibility, determine nutritional risk priority, recommend a food package tailored to participants' needs and preferences, schedule appointments, and interface with Medi-Cal, California's Medicaid system. The system also assists staff with referrals to other public assistance programs for which the applicant may be eligible. An advantage to an on-line, real-time system is that if someone attempts to enroll at one agency while actively enrolled at another agency elsewhere in the state, the system recognizes this attempt and alerts the WIC staff.

The state-level agency provides hardware and software, computer support, technical assistance, and the training necessary for the local agencies to use the system. It also provides local agencies with nutrition education and breastfeeding promotion materials, training, and assistance in fraud and abuse prevention efforts, and conducts statewide outreach campaigns.

Characteristics of the Geographic Area Served by the Long Beach WIC Program

The Long Beach WIC program serves the city of Long Beach, which is located on the southern California coast in Los Angeles County, with a 1997 estimated population of about 437,800.

According to 1990 Census data, 17 percent of all Long Beach residents lived below the poverty level. The data indicated that Long Beach was ethnically diverse, with 24 percent of the population Hispanic, 13 percent African-American, and 13 percent Asian/Pacific Islander. In March 2000, the WIC Director reported that approximately 78 percent of Long Beach WIC participants do not speak English as a primary language.

Local Agency's Program Characteristics

Sponsoring Organization

Long Beach WIC, which has operated in the city for more than 23 years, is sponsored by the city's Department of Health and Human Services, one of only three independent city-operated health jurisdictions in California. The WIC Director described the WIC program as a gateway to the Department's other programs such as lead poisoning prevention, child health and disability, immunization, and the prenatal clinic.

The Department charges the WIC program for indirect costs, such as personnel, accounting, and postage. However, because of a state limit on

the amount of indirect costs that can be charged to the program, only a portion of the indirect costs the Department incurs are charged to the WIC program.⁵ The Department also provides WIC with in-kind contributions of space for two sites. Other in-kind contributions from the sponsoring agency included utilities for two sites, equipment, furniture and translation services.

WIC Sites

In California, WIC clinics are referred to as WIC sites. This was done to distinguish the role of the California WIC program from the health care system. The main Long Beach WIC site is collocated with the Department of Health and Human Services and serves an average of 9,300 participants each month. To make services more convenient to participants with limited transportation, Long Beach has four other sites—on a hospital campus, in a stand-alone building, in a city-owned health facility, and in a strip mall. The number of participants being served at three of the four additional sites ranges from a monthly average of about 4,000 to 8,000. The fourth site opened in February 2000 and at that time was serving about 257 participants. The WIC Director expected that site to serve a monthly average of about 5,000 participants after 3 months of operation.

The sites operated Monday through Friday. Two of the sites operated from 7:30 a.m. to 6:00 p.m.; two from 7:30 a.m. to 5:30 p.m.; and one, the newest, from 8:00 a.m. to 5:00 p.m. On Monday and Tuesday, the main site had extended hours to 7:00 p.m., as well as every Saturday from 8:00 a.m. to noon.

Staffing

At the time of our study, Long Beach WIC had 53 staff, and all but 2 worked full-time, for a total of 52.2 full-time equivalent staff. The WIC Director is a registered dietitian who has been with the program since 1984. Fifteen of the staff were also registered dietitians. Administrative registered dietitians developed local agency policy and procedures as needed to implement new regulations, assessed staff training needs in nutrition education, and developed and implemented staff training programs on nutrition education. Twenty-one of the staff were nutrition aids or assistants who were CPAs. Seventeen of the staff were clerical or support staff. Of the 53 staff at the agency, 28 were considered contract consultants who are not permanent employees of the sponsoring organization and therefore did not receive health or vacation benefits. The sponsoring organization was exploring the

⁵ In accordance with state policy, local agencies cannot charge the WIC program for indirect costs in excess of 10 percent of program expenditures for personnel minus benefits.

option of converting the contract WIC employees to city employees with benefits, as a means of improving staff retention. Converting these employees would increase personnel costs for Long Beach WIC, according to Department staff.

Each of the agency's five sites had a registered dietitian as a supervisor and a team leader. The supervisor provided counseling to high-intervention participants and supervised the paraprofessional staff. The team leader was responsible for assisting with nutrition education by teaching classes and keeping education materials up-to-date.

Number of Participants Served

Long Beach WIC's monthly participation rate increased from 9,000 in 1992 to 28,452 in October 1999. Table 22 shows the number of participants by category served in October 1999. In August 2000, according to the WIC Director, approximately 18 percent of the agency's participants served in an average month were considered high-intervention.⁶

Table 22: Number Participants by Category, September 1998 and October 1999, at Long Beach WIC

Participant category	Number of participants	
	September 1998	October 1999
Pregnant women	2,842	2,639
Breastfeeding women	1,699	1,725
Postpartum women not breastfeeding	2,100	2,007
Infants	6,136	6,063
Children	17,231	16,018
Total	30,008	28,452

Major Aspects of the Program's Delivery of Nutrition Services and Administration

⁶ In California, high-risk is referred to as high intervention level.

Participant Services

Long Beach WIC, in accordance with California WIC policies, strongly encouraged participants to obtain their physical measurements (such as height and weight) and the results of blood tests from their Medi-Cal provider, the state’s Medicaid program, or private physician, thus decreasing the amount of time WIC staff need for this activity. In California, WIC staff do not do blood work to assess medical conditions such as anemia. Requiring this information from a medical provider has several advantages: it encourages the applicant to visit a medical provider, requires less staff time, and eliminates the need for specialized staff. If an applicant does not have all of the information needed to determine eligibility, the applicant is typically approved for 1 month’s participation and must bring the needed information at the next visit. Initially, all participants are seen by a CPA. Participants determined to be high-intervention are typically seen the following month by a registered dietitian. In some instances, a registered dietitian would see high-intervention participants the same day. Long Beach, in accordance with state requirements, required that a nutritionist or a registered dietitian develop an individual care plan for all high-intervention participants.

Since Long Beach schedules appointments in blocks of time, staff report that participants are seen on a “first-come, first-served” basis, contributing to a typical 30-minute waiting time. One site reported about 25 percent of its appointments were walk-ins, and another reported that as much as 40 percent were walk-ins. Long Beach uses an automated telephone calling system to make recorded calls reminding participants of upcoming appointments and to reschedule missed appointments. According to the WIC Director, the missed appointment rate at the end of any given month is less than 10 percent.

The frequency of voucher issuance varies by participant type and risk category as shown in Table 23.

Table 23: Category of Participant and Frequency of Voucher Issuance at Long Beach WIC

Type of participant	Frequency of voucher issuance
Pregnant woman	Monthly
Infant, first 2 months	Monthly
Infant, 3 to 12 months	Monthly/bimonthly
Child	Monthly/bimonthly

High-intervention

Monthly/bimonthly

Long Beach WIC typically refers its participants to other service providers by giving them access to a listing of providers. Two of Long Beach's sites have a binder of referral information available at the reception desk for use by applicants and participants. Staff note the immunization status of child participants in their case record and refer participants to immunization services as necessary. In addition, they offer a class on the benefits of immunizations. Long Beach also distributes a referral guide to participants that lists services such as low-cost health clinics. WIC does not provide the names of, or recommendations to, specific doctors. In addition to counselors, receptionists answer questions and provide brochures and pamphlets as requested on a variety of topics, including child care and parenting. Long Beach staff are not expected to note in the participant data system to whom the participant was referred. The staff indicated that they did not always follow-up with the participant on referrals.

Regarding voter registration, staff asked participants whether they were registered to vote during the enrollment appointment and noted the answer on the back of the participant's file folder. The program also has voter registration forms available.

Nutrition Education

Long Beach WIC presented some type or level of nutrition education at almost every participant contact. One-on-one nutrition education discussions began during the nutrition assessment phase of the certification process, when the dietitian provided feedback on the participant's reported diet. The certification appointment that we observed lasted about 45 minutes. Staff typically discussed aspects of nutrition information and diet informally during the certification or recertification process or during any other contact with a participant and handed out brochures to supplement the discussion. The registered dietitians provided nutrition education to high-intervention participants during one-on-one counseling sessions. They also referred participants who needed medical nutritional counseling to registered dietitians in medical settings. Long Beach WIC also provided nutrition education, particularly to low-intervention participants, through 15-minute classes that addressed nearly 40 different topics. These classes were offered both to individuals and to groups of between 5 and 20 participants. For instance, during an individual class given to the mother of a 2-month old infant, the CPA advised the mother to avoid the ready-to-feed formula that was giving the baby diarrhea and use the powdered formula instead. In November 1999, these short

classes were being offered about 12 times per day at each of the sites. According to the nutrition education coordinator, about 55 percent of the nutrition education is provided in one-on-one sessions, and the remaining 45 percent is provided in group sessions. She indicated that there was inadequate time to develop new classes.

Long Beach WIC also provided nutrition education through brochures and pamphlets, educational displays relating to nutrition such as posters illustrating general nutrition information such as the Food Pyramid, and videos. Pamphlet and booklet topics included nutrition during pregnancy and infant feeding. Nutrition education was also provided by playing WIC or nutrition-related videotapes in the waiting rooms. (See fig. 7). Video topics observed at one site in Long Beach included cooking with beans and infant safety.

Figure 7: Use of Videotapes in the Waiting Area of a Long Beach WIC Site



To serve its multilingual population, Long Beach WIC hired bilingual staff to provide nutrition education to non-English-speaking participants. Classes were taught in several languages, including Spanish, Khmer, Laotian, Vietnamese, and Hmong. Generally, classes were geared toward

the adult participants. Long Beach staff indicated that they recently taught a pilot class on nutrition geared to children 1 to 5 that was well-received by participants and caregivers. However, according to the nutrition education coordinator, the program lacked the staff to continue to teach this type of class.

Breastfeeding Promotion and Support

All of the Long Beach WIC staff were trained to promote breastfeeding. Breastfeeding information and education is provided to all pregnant participants at the first appointment and staff distributed promotional materials to the participant at that time. The state agency requires local agencies to provide breastfeeding education and to make at least two contacts with the new mother after delivery to encourage breastfeeding. Long Beach WIC staff visited two hospitals in the city once a week to provide breastfeeding support to all new mothers. Long Beach WIC also used its own staff to develop breastfeeding and nutrition education brochures for its Cambodian participants.

In fiscal year 1999, about 7 percent of Long Beach's infant participants were exclusively breastfed and about 20 percent were partially breastfed. In March 1999, California WIC staff reported that the statewide average rates for exclusively and partially breastfed WIC infants were 10 and 24 percent, respectively.

Program Administration

Maintaining participants' records. Long Beach WIC tracks participant data on a real-time basis and issues food vouchers using the state system. Because of the system, the agency needs to maintain only minimal paper records. During a participant's initial visit, staff enter all participant information into their computer system to establish a participant record. The system automatically identifies the participants' level of nutritional need (intervention level) on the basis of this information. According to the WIC Director and staff, the state system has significantly improved the workflow at the sites and reduced participants' waiting times. However, on occasion, the system goes down. When this happens, participants return to the site later to pick up their food vouchers or wait at the site for vouchers to be issued by hand or for the computer to come back on line. To minimize the time participants spend at the site during a return visit, staff issued participants a special pass that allows them to get served immediately.

Managing vendors. Local agencies in California have no role in vendor management. Long Beach staff will send participant complaints about vendors to the state and to the individual vendors.

Outreach. In fiscal year 1998, staff contacted local school officials, other social service providers, officials at local hospitals or medical centers, area physicians, local community groups, and local health associations or professional groups. They also used display booths or tables at community fairs, mailed program literature to interested persons, and encouraged referrals by participants. Long Beach WIC also had written agreements, in 1999, with six other Department of Health and Human Services programs and other organizations. These agreements included provisions for the mutual referral of participants, inclusion of medical data when appropriate in referrals, and regular planned reviews of referral outcomes.

Travel. WIC staff are typically assigned to work at one site location and do not travel among the sites to deliver program services. However, staff do on occasion travel to other sites to attend training.

Retaining and recruiting personnel. The WIC Director indicated that the program had several unfilled positions and had difficulty identifying candidates for the positions because it was unable to offer competitive salaries. Salaries for registered dietitians and nutritionists at the Long Beach WIC are not competitive with salaries offered by private sector, according to the Director. In order to stretch the funds available for personnel, Long Beach WIC began, over 20 years ago, to employ contract employees, who do not receive health or vacation benefits. As mentioned above, 28 of the staff were contract employees. The WIC Director also reported having some problems maintaining an adequate staffing level and a staff turnover rate of about 15 percent. According to sponsoring organization officials, the WIC program has become a training ground for nutritionists, who then leave for higher-paying jobs. To improve staff retention, the sponsoring agency was exploring the option of converting the contract employees to city employees with benefits.

Expenditures of Program
Funds and Use of
Nonprogram Resources

Table 24 shows the fiscal years 1998 and 1999 program expenditures made by Long Beach WIC by category. The program expenditure per participant per month in fiscal year 1999 was \$8.43.

Table 24: Long Beach WIC Program Expenditures by Category, Fiscal Years 1998 and 1999

Category	Fiscal year 1998		Fiscal year 1999	
	Amount	Percent of total	Amount	Percent of total
Personnel and benefits, excluding contracted personnel	\$1,362,422	47%	\$1,470,586	50%
Contracted personnel	942,968	33%	770,045	26%
Equipment and supplies	31,086	1%	69,240	2%
Facilities rental, including utilities, maintenance, and telephone	147,466	5%	200,726	7%
Indirect costs	142,500	5%	147,500	5%
All other	272,003	9%	286,817	10%
Total	\$2,898,444	100%	\$2,944,914	100%

Note: Totals may not add to 100% due to rounding.

During fiscal years 1998 and 1999, Long Beach WIC also received a grant of about \$238,000 from the California WIC program for a 2-year smoking cessation program.

The program's major nonprogram resources were in-kind contributions from the sponsoring organization, a portion of the indirect costs incurred to operate the program, and space. Regarding the indirect costs, according to the sponsoring organization's cost allocation plan for 1998, the indirect cost rate for WIC was 15 percent of total direct operating expenses, or \$415,504. In accordance with state WIC regulations, which limit indirect costs to 10 percent of expenditures for personnel excluding benefits, Long Beach WIC paid \$142,500 in indirect costs in fiscal year 1998. The Department of Health and Human Services covered the balance of the indirect costs the Long Beach WIC incurred to operate the program—\$273,004. Regarding the space contribution, the sponsoring organization's in-kind contributions of space at two sites were valued at \$60,000. The total of these two contributions, approximately \$333,000, represented about 11 percent of program expenditures in fiscal year 1998, or about 11 cents in nonprogram resources for every dollar in costs covered with program funds.

We did not obtain estimates of the value of other nonprogram resources, such as equipment, furniture, and translation services.

York, Pennsylvania, WIC Program

Overview of the Pennsylvania State WIC Program

York WIC is one of 25 local agencies providing WIC services in Pennsylvania. In fiscal year 1999, the average monthly number of participants served by these agencies was 238,203. That year, the agencies ranged in size from about 1,400 to 48,000 participants, on average, each month. Of the 24 Pennsylvania local agencies that responded to our 1999 nationwide survey of local WIC agencies, 14 were operated by county or community health agencies, 5 by community action agencies, 2 by hospitals, and 3 by other types of organizations. Ten of the agencies responding to the survey operated in rural settings, 4 in urban, 2 in suburban, and 8 in mixed geographic settings.

In fiscal year 1999, Pennsylvania expended federal NSA grant funds totaling \$35,315,599, or about \$12.35 per participant per month. Pennsylvania provided no state funds for WIC nutrition services and administration. About 24 percent, or \$8,571,993, of NSA expenditures were made at the state level. The remaining 76 percent, or \$26,743,606, was made by the local WIC agencies.

Pennsylvania distributes WIC program funds to local agencies each year largely on the basis of a formula that uses three per participant per month rates. The first and highest rate is for the first 15,000 participants served by an agency. Successively lower rates are used for the next 10,000 participants and for over 25,000 participants, respectively. Such a formula provides somewhat lower per participant per year funding to agencies with caseloads over 15,000. In fiscal year 2000, only 3 of the state's 25 local agencies had caseloads over 15,000. Some program funds are distributed to local agencies to cover special needs, such as migrant programs or clinic relocations.

The Pennsylvania WIC participant database system was first automated in 1983 and upgraded in 1991. The statewide-automated system is used, among other things, to record and track participant information, assign nutritional risk codes to participants, track immunization status, track referrals, run reports, create custom food packages and print food instruments. The state conducts nightly batch processing of the participant information uploaded from the local agencies' computers. Local agency

program staff can obtain system technical assistance and support from the state WIC agency, such as assistance with managing reports and system development.

The types of support the state agency provides to local agencies include guidance on state policies and procedures; forms; brochures in several languages; technical assistance, such as handling participant abuses (e.g., dual participation); and nutrition and breastfeeding guidance. The state program also provides training to local agency directors through statewide meetings held three times a year.

Characteristics of the Geographic Area Served by the York County WIC Program

York WIC serves the county of York, which is located in south-central Pennsylvania. The topography of York County consists primarily of rolling hills, bordered on the east by the Susquehanna River. The county is a combination of urban and rural communities. Its estimated population in 1997 was 370,518, while the estimated population for the City of York was 40,087. The average unemployment rate for York County was 3.7 percent in 1998, while the rate for the City of York was reported in 1999 to be about 2 percent higher than the county rate.

In 1995, about 6.5 percent of the county population was living below the poverty level. The per capita income for York County in 1996 was \$23,610, while the City of York's per capita income was \$10,485. In 1996, an estimated 16.4 percent of the families and 31.2 percent of the children in the City of York lived in poverty. According to 1997 estimates, about 72 percent of City of York residents were white, about 21 percent African-American, and about 8 percent Hispanic. In April 1999, approximately 70 percent of York's WIC participants were white, about 14 percent were African-American and about 15 percent were Hispanic.

Local Agency's Program Characteristics

Sponsoring Organization

The York WIC program is administered by the Community Progress Council (CPC), a community action agency. Chartered in 1965, CPC is governed by a board of Directors representing low-income, business sector, and elected community members. In addition to the WIC program, which it has operated since 1975, CPC operates Head Start of York County; the Foster Grandparents program, a Welfare-to-Work program, a Case

Management program, a Department of Community Centers, and the Senior Community Services Employment Program. (The Case Management program provides homeless and low-income families and individuals with assessment, referral, and follow-up services aimed at building self-sufficiency and increasing community involvement.)

CPC charges the WIC program for some of its indirect operational costs, including costs related to management and administrative personnel, auditing, and postage. In fiscal year 1999, the indirect costs the sponsoring organization charged the program were based on a rate of 6.3 percent of program expenditures for personnel, excluding benefits. According to the Executive Director of CPC, the amount charged to the program represented only part of the indirect costs incurred to operate it. The remaining indirect costs were covered by CPC's Community Services Block Grant. CPC also provided WIC with in-kind contributions in the form of one part-time administrative support staff whose pay was covered by stipends from a Department of Labor grant. The sponsoring organization also provided some miscellaneous contributions, such as office furniture and supplies.

WIC Clinics

To provide WIC services throughout York county, York WIC operated nine clinics. The main clinic is collocated with CPC's Case Management program in downtown City of York. In addition to the main clinic, the York County WIC program operated eight satellite clinic sites. One, referred to as Noell, is located in the City of York, and seven are located in the boroughs of Delta, Dillsburg, Dover, Hanover, Lewisberry, New Freedom, and Red Lion. Normal hours of operation for the main clinic were 8:00 a.m. to 5:00 p.m., 5 days a week. To provide extended hours for participants, the main clinic was also open 3 days a month until 6:30 p.m. The York Director said it was a hardship for one of her staff to work evening hours because the amount she paid for childcare during the evening was more than she earned for those hours. Most of the program's participants receive services at the main City of York site. The hours of operation at the satellite sites varied, with most operating 1 or 2 days a month.

The satellite sites all share space with other health and social service programs, such as a local food pantry, a family health clinic, an immunization clinic, and a clothing bank. Staff noted that some participants who travel to satellite offices feel that there is a lack of privacy in these settings because several nutritionists are working with participants in the same space, at the same time, and discussions can be overheard.

Staffing

At the time of our study, York WIC had 20 staff: 10 full-time and 10 part-time, for a total of 16.2 full time-equivalent staff. The WIC Director has worked for WIC since 1975 and has a B.S. in Nutrition. In addition to the Director, eight staff members, including a nutrition education coordinator, four nutritionists, two nurses, and one lactation consultant, were CPAs. Other staff included an administrative assistant, a secretary, four nutrition assistants, four clerks, and a janitor. The WIC Director is the only salaried employee; the rest of the staff are paid hourly. Staff are assigned to provide services at the satellite sites on a rotating basis.

Number of Participants Served

In fiscal year 1999, the average monthly participation was 4,859 participants. Table 25 shows the number of participants by category served in September 1998 and November 1999. The WIC Director was not able to provide an estimate of the percent of participants considered high-risk in an average month in fiscal year 1999. Although participants are identified as high-risk in their individual paper records, the data system does not identify risk category.

Table 25: Number of Participants by Category, September 1998 and November 1999, at York WIC

Participant category	Number of participants	
	September 1998	November 1999
Pregnant women	534	554
Breastfeeding women	133	107
Postpartum women not breastfeeding	508	462
Infants	1,369	1,417
Children	2,320	2,297
Total	4,864	4,837

Major Aspects of the Program's Delivery of Nutrition Services and Administration

Participant Services

During certification and recertification sessions, participants were seen by a CPA, but the nutrition assistant in some instances collected the income and residency information, measured height and weight, and tested blood for anemia. (Both CPAs and nutrition assistants were able to perform blood tests.) During the initial sessions, a CPA would typically assess the participant's medical or nutritional risk, and, if the applicant was eligible, prescribe a food package, explain program policies and procedures, and provide some nutrition education. One senior staff member indicated that in performing the assessment she only reviewed the participant's diet through a diet recall protocol if she could not find a medical reason to establish eligibility or if the participant had questions about her diet. During the initial session, either a CPA or nutrition assistant also checked on and recorded the immunization status of child participants and issued vouchers. Staff reported, and we observed, that some nutrition education and breastfeeding promotion and support was also provided during the nutrition assessment process.

According to the nutrition education coordinator, a nutritionist was required to develop an individual care plan for all high-risk participants. These plans included information on the nutrition education topics addressed, the materials provided to the participant, and specific reasons for any change in a participant's risk status. These plans, according to the nutrition education coordinator, were typically communicated to the participant in a combination of written and/or oral suggestions. The care plan is kept in hard copy in the participant's file.

Vouchers were typically issued to all participants on a bimonthly basis. The CPAs manually created the first set of vouchers for new participants. Subsequent vouchers were printed in advance of the next scheduled pick-up appointment by the participant data system.

The staff typically scheduled appointments for certification and recertification sessions. Walk-ins were typically scheduled for a certification session at a later date because applicants may not have all the required documentation needed for certification. The main clinic frequently got walk-ins for voucher pick-up, but staff discouraged the practice. Staff indicated that waiting times ranged from 10 minutes to an hour, depending on the number of staff working on a given day. When time was available, staff called new participants to remind them of upcoming appointments and sent reminder postcards to participants who missed appointments. York WIC, as required by the state, tracked the "no-show" rate for recertification and voucher pick-up appointments. Recent no-show

rates for recertification and voucher pick-ups were about 8 percent and 10 percent in November 1999 and May 2000, respectively.

According to the WIC Director, at initial certification participants received a brochure that provided information on a number of local service providers. She indicated that referrals were commonly made to the state's medical assistance program (Medicaid), CPC's case management program, Food Stamps, cash assistance, medical providers, food pantries, and shelters. Typically, the participant was given the brochure and the phone number for a specific service provider. Staff normally entered information about referrals in the participants' files as well as information related to eligibility for medical assistance, cash assistance, and food stamps. Information in the participant database could be used to track the number of referrals made to the different types of service providers. Staff reported that they did not always follow-up with the participant on the outcome of referrals that had been made.

Regarding voter registration, in accordance with state policy, York staff ask each adult participant if she is registered to vote, note the response in the participant's file, record the response on a data collection form, enter the response into the data system, give the voter registration form to the participant, and assist the participant in completing it. York staff also deliver completed forms to the voter registration office.

Nutrition Education

Nutrition education was typically provided in one-on-one sessions with both low- and high-risk participants during certification, recertification, and voucher pick-up appointments. The certification and recertification appointments that we observed lasted from 20 minutes to over an hour. One-on-one nutrition education discussions began during the nutrition assessment phase of the certification process, when the CPA provided feedback on the participant's reported diet. At many of the appointments that we observed, the content and the duration of the nutrition education provided were minimal. For example, participants were asked brief nutrition-related questions; however, there was little, if any, discussion of a participant's specific nutrition situation or of general nutrition education issues. One nutritionist told us that because staff try to adhere to the allotted time of 30 minutes per certification and recertification appointment, not much time was available to provide education after dealing with eligibility, assessment, and voucher issuance issues.

York participants also received general nutrition education from the brochures that staff distributed to supplement their nutrition education

discussions. Brochures on numerous nutrition topics and display posters were also available in the main clinic's waiting area. (See fig. 8.) The WIC Director told us that the clinics normally played WIC orientation, nutrition-related, or food demonstration videos in the waiting room, but, at the time of our study, the videotape machine was out of order. The WIC Director told us that the program does not offer group classes because space is not available at the clinics.

Figure 8: Use of Brochures in the Waiting Area of the Main York WIC Clinic



To serve non-English-speaking participants, York hired bilingual staff to provide nutrition education to Hispanic participants. The local hospital's lactation consultants referred Hispanic patients to York WIC for breastfeeding services because the hospital does not have employees who can speak or translate Spanish. York WIC had nutrition and breastfeeding materials available in Spanish, Vietnamese, Laotian, and Cambodian. York WIC staff did not provide nutrition education directly to child participants. They did distribute sipper cups and toothbrushes to the children to promote good dental health.

Breastfeeding Promotion and Support

Breastfeeding at York WIC was typically promoted through one-on-one counseling and/or handouts. The breastfeeding coordinator reported that all of the staff—including the clerks—had been trained to promote and encourage breastfeeding. However, we observed that during the certification appointments for two pregnant women, breastfeeding education or counseling was minimal or did not occur at all. One of the women was only asked about her breastfeeding intentions while no mention of breastfeeding was made to the other woman. The breastfeeding coordinator, who is also a lactation consultant, spent much of her time certifying and recertifying participants. She indicated that if more staff were available she would be able to devote more of her time promoting breastfeeding.

According to the breastfeeding coordinator, breastfeeding classes were not offered because of low attendance in the past. The breastfeeding coordinator did not conduct telephone follow-up calls to encourage and support breastfeeding because of the difficulty she had previously encountered in trying to reach participants. The breastfeeding video was not being shown to participants during our visit because the only videotape machine was out of order. Breastfeeding support groups were not offered because of lack of staff time and facilities. York WIC provided breast pumps for rent and for distribution to WIC breastfeeding mothers for a minimal fee.

In November 1999, about 4 percent of York WIC infant participants were exclusively breastfed. In December 1999, the percentage of infant participants at York who were partially breastfed was about 46 percent, compared with about 51 percent for WIC participants statewide.

Program Administration

Maintaining participants' records. Although York WIC tracked participant data and issued food vouchers using the state data system, it relied heavily on paper records. CPAs or nutritionists first recorded participant's certification and other appointment-related information on paper forms, then a clerk entered the data into the computer system. Staff had access to the statewide system through two of its computers. They were able to use the state system to generate a few standardized reports, such as breastfeeding rates or vendor lists. According to the WIC Director, staff would use computers more if more were available. At the time of our study, four computers were available for staff use.

Managing vendors. In accordance with state guidelines, York WIC had significant vendor management responsibilities. At the time of our study, it

managed 40 vendors. One staff member, the administrative assistant, devoted part of her time to vendor management. Her responsibilities included training vendors, monitoring their adherence to program rules, performing inventory audits, and assisting state staff in vendor selection, authorization, and the performance of compliance buys. The administrative assistant indicated that there were insufficient resources to manage 40 vendors effectively.

Outreach. The administrative assistant who manages York's vendors also coordinates all of the outreach efforts. She reported that recent outreach included mailings to homeless shelters, substance abuse agencies, local high and middle schools, day care centers, health care groups and individual physicians. She served as member of two coalition groups that focused on community health issues. She actively coordinated with CPC's Head Start program and the county's foster care agency.

Travel. Thirteen York staff traveled to the satellite clinics to provide services. York reimbursed staff for travel to the satellite clinics and state WIC meetings.

Retaining and recruiting personnel. The WIC Director reported significant difficulty in recruiting and retaining WIC staff because she is not able to offer nutritionists and registered nurses salaries comparable to those that the county health department, local family planning organizations and hospitals can offer. The CPC Executive Director indicated that the salaries that the program is able to offer to WIC staff are "shameful." The WIC Director reported that the agency offers a nutritionist or dietitian half of the hourly rate offered for a comparable position at the local hospital. She can only offer the clerical staff an hourly rate of \$5.70, about three-quarters of the hourly rate being offered at the local fast food and retail stores. According to the WIC Director, one staff member pays more for babysitting than she makes on those evenings when she works extended hours.

Expenditures of Program
Funds and Use of
Nonprogram Resources

The expenditure per participant per month in 1999 was \$9.47. Table 26 shows the fiscal years 1998 and 1999 program expenditures for York WIC, by category.

Appendix IV
Detailed Summaries of the Six Case Studies

Table 26: York WIC Program Expenditures by Category, Fiscal Years 1998 and 1999

Category	Fiscal year 1998		Fiscal year 1999	
	Amount	Percent of total	Amount	Percent of total
Personnel and benefits excluding expenditures for contracted personnel	\$488,050	82%	\$464,554	84%
Contracted personnel	0	0%	0	0%
Equipment and supplies	13,567	2%	6,623	1%
Facilities and related expenses including utilities, maintenance, rent and telephone	47,845	8%	42,443	8%
Indirect costs	24,668	4%	23,353	4%
All other	24,460	4%	15,360	3%
Total	\$598,590	100%	\$552,333	100%

Note: Percents may not total to 100% due to rounding.

The major nonprogram resources used by the program were in-kind contributions made by the sponsoring organization and the landlord who leased the space for the main clinic. The in-kind contributions from the sponsoring organization were in the form of payment of some of the indirect costs incurred to operate the program and one part-time administrative support staff provided to the program at no cost. According to information provided by the sponsoring organization, in fiscal year 1999, about \$31,000 of the indirect costs it incurred to operate the WIC program were covered by its Community Service Block Grant. Additionally, about \$5,400 in Department of Labor grant funds were used to cover the costs of one administrative support staff assigned to WIC. The landlord's in-kind contribution was in the form of a charge for the space of the main WIC clinic that was below the market rate. Using information provided by the WIC Director, we estimate that in fiscal year 1999, the value of the discount on the rent would be about \$20,000.⁷ In fiscal year 1999 York WIC also used \$2,000 in grant funds from the city of York to educate mothers on baby bottle tooth decay. The total value of these nonprogram resources obtained from the sponsoring organization, the landlord, and the city of York in fiscal

⁷ According to the WIC Director, the value of the contribution was between \$10,000 and \$30,000. For our estimate we used \$20,000.

year 1999 was about \$58,400. This represented approximately 11 percent of program expenditures in fiscal year 1999 or about 11 cents for every dollar in costs covered with program funds.

York WIC also made use of other miscellaneous nonprogram resources, including shared space used at its satellite locations, waiting room furniture in the main clinic that was donated by a local pediatric practice, and some office furniture donated by a local bank. We did not obtain or develop an estimate of the value of these miscellaneous in-kind contributions.

Zuni WIC Program

Overview of the Zuni WIC Program

The Zuni WIC program is operated by the Pueblo of Zuni, a federally recognized Indian Tribe. It is one of 33 Indian Tribal Organizations (ITO) operating WIC programs nationwide that are considered to be state-level agencies by the U.S. Department of Agriculture (USDA). Since 1979, the Zuni WIC program has operated under the auspices of the Zuni Tribal Council, a six-member Council headed by an elected governor and lieutenant governor. The Governor and the Council are elected to 4-year terms and governed by the tribe's own constitution. According to the WIC Director, the WIC program is one of the largest Zuni-run programs. In fiscal year 1999, Zuni provided WIC services to a monthly average of 857 participants. According to the Governor, WIC is a major program in the tribe's effort to improve community health, and the program closely coordinates its efforts with the Zuni Pueblo's only medical facility—a U.S. Indian Health Service hospital.

In fiscal year 1999, Zuni WIC, as a state-level agency, expended federal NSA grant funds totaling \$264,372, or about \$25.71 per participant per month. According to information Zuni reported to USDA, about 23 percent of NSA expenditures, or \$60,530, was made for state-level program management costs. The remaining 77 percent, or \$203,842, was expended for costs typically incurred by local agencies in providing nutrition services and administering the program.

Zuni WIC's participant database system was first automated in 1996. The current system was developed by the Inter-Tribal Council of Arizona (ITCA) and implemented at Zuni in October 1999. Its capabilities include

maintaining participant records, generating reports, and printing food vouchers. The system processes participant certification data as they are entered. The WIC Director described the system as user-friendly, flexible, and fast. She found the printed forms had a quality assurance problem and was working with ITCA on programming. ITCA provides technical assistance for the database, via telephone, and the agency has a contract for hardware and other software support.

The Tribal Council charges the WIC program for indirect costs, such as procurement, accounting, and personnel. The indirect rate for fiscal years 1998 and 1999 was 16.7 percent of total direct costs, less capital expenditures, pass-through funds, and other exclusions. The Pueblo applied the indirect rate only to WIC administrative expenditures. The ITO also provides WIC with in-kind contributions of the land for the WIC trailer facility.

Characteristics of the Geographic Area Served by the Zuni WIC Program

Zuni Pueblo is a rural community in New Mexico with a total population of about 10,895 in July 1999. The main reservation is situated in a semiarid valley surrounded by mesas, about 150 miles southwest of Albuquerque. The Zuni WIC program provides service to residents within Zuni tribal boundaries and some Navajo tribal areas. Since only 16 of the 560 miles of roads maintained by the county are paved, bad weather conditions along rural dirt roads can make travel almost impossible and further isolate large portions of the population.

In 1997, an estimated 47 percent of Zuni's labor force was unemployed. According to the Governor, the Zuni population has elevated rates for diabetes, hypertension, and heart disease, and these need to be reduced. In 1998, according to a report from the local Indian Health Service (IHS) hospital, between 35 and 60 percent of Zuni adult patients over the age of 50 have diabetes, and about 28 percent of Zuni patients between the ages of 2 and 4 years old were obese. Approximately 87 percent of the Zuni Pueblo population were members of the Zuni tribe.

Zuni WIC Program's Characteristics

WIC Clinics

Zuni WIC provided nutrition services at four locations: the clinic in Zuni, a grocery store in a nearby town, and two local high schools. The Zuni clinic

provided the full range of nutrition services (see fig. 9); its normal hours of operation were Monday through Friday, 8:00 a.m. to 4:30 p.m. This clinic offered limited services during extended evening hours, which were held several days a month. Most of the program's participants received services at the main clinic.

Figure 9: Waiting Area in Zuni WIC Clinic



The grocery store site—located in Ramah, New Mexico—was approximately 17 miles from Zuni. Staff set up a card table near the front of the store. Activities at the site were limited to issuing vouchers to low-risk participants. Staff were at this site every other month, from 9:00 a.m. to 3:00 p.m. This site served from 20 to 25 participants, most of whom were Navajo.

The two high schools are located in the Zuni Pueblo. WIC staff used space in the day care centers at the high schools. Activities at these sites were also limited to issuing vouchers to low-risk participants. Vouchers were issued at these sites twice a month. Each high school site served from 10 to 20 teenage participants.

Number of Participants Served

In fiscal year 1999, Zuni WIC served a monthly average of 857 participants. Approximately 33 percent of the agency's participants served in an average

month during that year were considered high-risk. Table 27 shows the number of participants by category served in September 1998 and 1999.

Table 27: Number of Participants by Category, September 1998 and September 1999, at Zuni WIC

Participant category	Number of participants	
	September 1998	September 1999
Pregnant women	62	53
Breastfeeding women	66	66
Postpartum women not breastfeeding	29	36
Infants	160	166
Children	544	517
Total	861	838

Staffing

At the time of our study, the program employed six full-time and one part-time staff, for a total of 6.4 full-time equivalent staff. The WIC Director had been with the program for 20 years and is an active member of the community. She was the former department head of the Department of Human Services and the current president of the board of education. The part-time staff member was a registered dietitian, and the only lactation consultant in the county. Two of the other five full-time staff and the WIC Director were designated as CPAs—having passed a competency-based test developed by registered dietitians from the New Mexico ITOs and approved by USDA. One of the full-time staff members was a breastfeeding peer counselor, and two were administrative support staff. All of the staff were paid on an hourly basis.

Major Aspects of the Program’s Delivery of Nutrition Services and Administration

Participant Services

During the certification and recertification sessions, the Zuni WIC staff routinely measured participants’ height and weight and tested blood for anemia. Zuni WIC also received a health summary from the IHS hospital prior to each participant’s certification or recertification visit. This

summary typically included the latest information that the hospital had on the participant's height, weight and immunization status. At each visit participants completed a form to identify the foods they were eating. Staff reported, and we observed, that some nutrition education and breastfeeding promotion and support was also provided during the nutrition assessment process. CPAs see the low-risk participants, while participants considered to be high-risk were seen by the staff dietitian as well as a CPA. An individual care plan is typically developed for high-risk Zuni participants. The Zuni WIC Director believed that the required proof of income is a barrier to Zuni residents applying for WIC services because they find it humiliating to have to prove how poor they are.

The Zuni WIC clinic schedule dedicated Mondays and Tuesdays of each week to updating files, preparing participant folders for those who are scheduled to be seen later in the week, and scheduling participants for upcoming appointments. Participants were scheduled for visits on Wednesdays and Thursdays of each week. Walk-ins were seen on Thursdays. Fridays were dedicated to completing any work left over from earlier in the week. Staff sent letters to participants who missed more than four appointments. If they could not reach the participants by letter, then they visited them at home. During the certification process, as described by the staff, participants returned to the waiting area at least twice while their case information is updated. Regarding the flow of participants through the main clinic, no recent information was available about the amount of time participants spent waiting for services.

All staff members were responsible for issuing the food vouchers, and the agency tracks voucher issuance on the computer system. Food instruments could be printed on demand at the main clinic and were printed beforehand for issuance at Ramah and the local high schools. Vouchers were typically issued to participants every 2 months. Zuni WIC staff sometimes made preappointment calls, but routinely made follow-up telephone calls or sent postcards to participants who missed an appointment.

In making referrals to the IHS health care providers, Zuni WIC staff completed a hospital referral form, recording the reason for the referral. Copies of the form went to IHS, the participant, and the participant's WIC file. After completing the form, the WIC staff called the IHS health care provider and scheduled an appointment for the participant. This was done to help ensure that participants followed through on the referral. After seeing the referred WIC participant, the IHS provider returned the referral form to Zuni WIC, indicating the services provided. If the referred agency

did not return the form to WIC, staff followed-up with the participant during the next recertification and, if necessary, telephoned the IHS provider to obtain the completed form. In referring participants to other types of providers, such as social services, staff sent a memo notifying the agency that a referral has been made. For such referrals, the nature of referral and the date it was made was noted in the participant's WIC record. With regard to voter registration, staff provided participants with registration forms and referred them to the county to register. The referral was noted in the computer system.

Nutrition Education

The CPAs and the dietitian normally provide nutrition education through one-on-one sessions, during certification, recertification and voucher pick-up appointments, because group education is less accepted culturally in the Zuni community. Nutrition education sessions typically involved reviewing the participant's diet and addressing any identified nutrition deficiencies, such as low iron levels, by suggesting foods to eat. The recertification appointments that we observed lasted between 45 and 60 minutes. These sessions were often supplemented with brochures dealing with good nutrition, such as the Food Pyramid. The WIC registered dietitian referred participants who needed medical nutritional counseling to the registered dietitian at the local IHS hospital. In order to facilitate the delivery of nutrition education, the program employed bilingual staff who spoke Zuni during all or part of the appointment. Zuni WIC staff offered regular nutrition education to child participants, through individual discussions in English and Zuni, and coordinated activities with Head Start and the IHS-sponsored diabetes prevention program.

Most of the participants came to the WIC clinic for their bimonthly voucher pick-up, enabling staff to use this opportunity to offer classes, such as 15-minute cooking demonstrations in the clinic's kitchen. Furthermore, Zuni WIC had some interactive displays depicting general nutrition information that required participants to study the presentation and answer review questions, such as a display on juices that depicted the relative amount of fruit juice in locally purchased juice drinks. In addition, Zuni WIC had created over a dozen nutrition education brochures using graphics depicting Native American women and children and culturally appropriate foods, such as the Pueblo Food Pyramid.

Breastfeeding Promotion and Support

Zuni WIC offered many breastfeeding promotion and support activities, such as one-on-one counseling, quarterly group classes, home and hospital visits, breastfeeding pumps and aids, videos, promotional materials, and scheduled follow up. On a daily basis, the breastfeeding peer counselor

tracked new births at the local hospital, conducted hospital visits at the maternity ward in the morning and home visits in the afternoon and made follow-up telephone calls at regular intervals to check on a breastfeeding mother's progress and provide assistance. To make breastfeeding convenient while mothers were visiting WIC offices, Zuni WIC dedicated private space for this purpose. In addition, Zuni WIC invested local resources to create and distribute a video that depicted Zuni and other Native American women and their experiences with breastfeeding. Zuni WIC shared this breastfeeding video and its brochures with other ITOs.

To support their efforts in this area, all of the Zuni WIC staff are trained to promote breastfeeding. In addition, the agency staff includes a certified lactation consultant, the only one in the area, and a full-time peer counselor. As a result of the long-term team effort, the program had, in fiscal year 1999, a breastfeeding initiation rate of 77 percent and a breastfeeding rate of 43 percent for infants 6 months and older.

Program Administration

Maintaining participants' records. While a substantial amount of participant and program data are maintained on the automated system, individual hard-copy participant records are also maintained to verify the accuracy of information on the new database system.

Managing vendors. Since Zuni WIC is a state-level agency, the staff are heavily involved in all aspects of vendor management, including selection, authorization, training, routine monitoring, compliance buys, inventory audits at participating vendors, enforcement, and payment of redeemed vouchers. One staff member was dedicated to vendor management and was supported by other staff. At the time of our study, Zuni WIC had nine vendors, five in the Zuni area and four in the Gallup area. Several of the small Zuni vendors raised concerns that their cash flow was being affected because of the length of time it took to get reimbursed for redeemed WIC vouchers, even though the program was reimbursing them within the contracted timeframes. The Pueblo of Zuni staff were aware of the issue and were attempting to speed up reimbursements.

Outreach. The program employs an outreach specialist who coordinates all such efforts. The specialist reported that she had conducted outreach at Head Start, the local health center, the hospital, high schools, and health fairs. In response to recent declines in caseload, WIC staff encouraged participants to inform friends of WIC benefits and opened the clinic for extended hours to serve working WIC mothers. The outreach staff mailed letters to potentially eligible participants by using Head Start's address list.

Posters and flyers were made to recruit participants and displayed at the offices of the local television station.

Travel. Zuni WIC staff traveled to three satellite sites to provide services. The WIC program purchased a vehicle for the staff for such purposes as visiting satellite sites, attending area training sessions, and responding to emergencies.

Retaining and recruiting personnel. There were no unfilled positions at the time of our study. The WIC Director did not describe any difficulties in hiring or retaining staff.

Expenditures of Program
Funds and Use of
Nonprogram Resources

Table 28 shows the fiscal years 1998 and 1999 program expenditures the agency made by category.

Table 28: Zuni WIC Program Expenditures by Category, Fiscal Years 1998 and 1999

Category	Fiscal Year 1998		Fiscal Year 1999	
	Amount	Percent of total	Amount	Percent of total
Personnel and benefits, excluding expenditures for contracted personnel	\$171,587.22	67%	\$179,918.92	68%
Equipment and supplies	21,148.77	8%	11,270.00	4%
Facilities and related expenses, including utilities, maintenance, rent and telephone	4,888.72	2%	5,483.71	2%
Indirect costs	36,833.94	14%	36,187.68	14%
All other: motor vehicle operation, postage, printing	22,937.84	9%	31,511.69	12%
Total	\$257,396.49	100%	264,372.00	100%

According to the WIC Director, the current funding level for nutrition services and administration is insufficient because nothing is factored into their funding to reflect the added costs of conducting their operation out of their own building.

The major nonprogram resource used by Zuni WIC in fiscal year 1999 was the sponsoring organization's in-kind contribution of rent-free land and a

grant from the IHS diabetes prevention program, Healthy Lifestyles, to distribute toys to encourage children's physical activity. A Zuni tribal official estimated the value of the ITO's in-kind contribution of the land for the WIC trailer facility at \$5,000 per year. The IHS grant amount was \$500. The total of these nonprogram resources, \$5,500, represented about 2 percent of program expenditures in fiscal year 1999, or about 2 cents for every dollar in costs covered by program funds.

Zuni WIC also received some minor nonprogram resources from other organizations. The two public high schools in Zuni provided shared space for WIC staff to deliver vouchers to teenage WIC mothers and a grocer in the neighboring town of Ramah also provided shared space for the delivery of vouchers. We did not obtain an estimated value of these nonprogram resources.

Time Study Results – Percent of Staff time and Staff Time Costs Spent on Activities

This appendix presents information on the results of the time studies conducted at each of the six agencies. For each agency, information is provided on the percent of staff time as well as the percent of staff time costs spent on specific activity subcategories in the four broader categories of participant services, nutrition education, breastfeeding promotion and support, and administration. Information on the time span of each time study and the calculation of percent of staff time costs are presented in appendix 1.

Table 29: Percent of Staff Time and Staff Time Costs –Gallatin

Category/subcategory	Percent of			
	Staff time	Staff time in category	Staff time costs	Staff time costs in category
Participant services activities				
Scheduling participants	13.6	25.7	13.4	26.3
Determining participants' eligibility	8.8	16.6	8.2	16.1
Assessing participants' nutritional risk	13.2	24.9	12.7	24.9
Making referrals and conducting follow-up	1.0	1.9	1.0	1.9
Explaining benefits and procedures to participants	1.2	2.3	1.3	2.6
Issuing checks	5.1	9.6	4.8	9.5
Providing or receiving training or other professional development	4.8	9.1	4.4	8.7
Making record notations	5.2	9.9	5.1	10.0
Total—all participant services activities	52.8	100.0	50.9	100.0
Nutrition education activities				
Providing one-on-one nutrition education or counseling	9.5	69.9	8.9	65.1
Providing group nutrition education	.6	4.4	.7	5.2
Developing materials and activities	.9	6.4	1.1	7.9
Consulting with medical providers regarding nutrition education of individual participants	.2	1.4	.2	1.5
Providing or receiving training or other professional development	.8	6.0	.8	5.5
Monitoring and evaluating nutrition education activities	1.6	11.9	2.0	14.7
Total—all nutrition education activities	13.6	100.0	13.7	100.0
Breastfeeding promotion and support				
Providing one-on-one breastfeeding instruction/counseling	4.6	91.2	4.3	89.8
Providing group breastfeeding instruction/counseling	.1	2.2	.1	2.8
Developing materials and activities	.1	2.1	.1	2.8

**Appendix V
Time Study Results - Percent of Staff time
and Staff Time Costs Spent on Activities**

(Continued From Previous Page)

Category/subcategory	Percent of			
	Staff time	Staff time in category	Staff time costs	Staff time costs in category
Participant services activities				
Consulting with medical providers regarding breastfeeding issues	.1	1.6	.1	1.9
Providing or receiving training or other professional development	.1	2.7	.1	2.5
Monitoring and evaluating breastfeeding promotion activities	<.1	.2	<.1	.2
Total—all breastfeeding promotion and support activities	5.0	100.0	4.7	100.0
Administration				
Outreach to potential participants	.8	2.6	.8	2.4
Outreach to health care providers and other organizations	2.4	8.5	2.9	9.6
Clerical tasks	11.5	40.3	11.5	37.3
Travel	4.9	17.3	5.1	16.6
Personnel tasks	.8	2.6	.8	2.5
Accounting and finance	1.9	6.5	2.3	7.6
Vendor management	.1	.5	.2	.5
General management	4.3	15.1	4.9	16.0
Organize self/work	.1	.3	.1	.3
Miscellaneous	1.8	6.3	2.2	7.1
Total—all administrative activities	28.6	100.0	30.7	100.0
Grand total	100.0		100.0	

Note: Totals may not add due to rounding.

Table 30: Percent of Staff Time and Staff Time Costs—Grady

Category/subcategory	Percent of			
	Staff time	Staff time in category	Staff time costs	Staff time costs in category
Participant services activities				
Scheduling participants	4.3	10.0	3.4	8.5
Determining participants' eligibility	4.9	11.4	4.9	12.4
Assessing participants' nutritional risk	10.7	24.7	11.1	27.6
Making referrals and conducting follow-up	2.9	6.7	2.2	5.6
Explaining benefits and procedures to participants	.5	1.2	.6	1.4
Issuing vouchers	9.7	22.5	7.0	17.3

**Appendix V
Time Study Results - Percent of Staff time
and Staff Time Costs Spent on Activities**

(Continued From Previous Page)

Category/subcategory	Percent of			
	Staff time	Staff time in category	Staff time costs	Staff time costs in category
Providing or receiving training or other professional development	1.0	2.2	1.0	2.6
Making record notations	9.2	21.3	9.9	24.6
Total—all participant services activities	43.2	100.0	40.1	100.0
Nutrition education activities				
Providing one-on-one nutrition education or counseling	4.5	51.4	4.7	49.2
Providing group nutrition education	<.1	.4	<.1	.4
Developing materials and activities	.8	9.5	1.1	11.3
Consulting with medical providers regarding nutrition education of individual participants	.3	3.3	.4	4.1
Providing or receiving training or other professional development	2.5	28.1	2.7	28.1
Monitoring and evaluating nutrition education activities	.6	7.3	.7	6.9
Total—all nutrition education activities	8.8	100.0	9.6	100.0
Breastfeeding promotion and support				
Providing one-on-one breastfeeding instruction/counseling	3.0	44.0	3.4	43.9
Providing group breastfeeding instruction/counseling	.3	3.6	.3	3.6
Developing materials and activities	.9	13.1	1.0	13.1
Consulting with medical providers regarding breastfeeding issues	.8	11.6	.9	11.5
Providing or receiving training or other professional development	1.6	24.3	1.9	24.6
Monitoring and evaluating breastfeeding promotion activities	.2	3.3	.3	3.3
Total—all breastfeeding promotion and support activities	6.7	100.0	7.8	100.0
Administration				
Outreach to potential participants	.4	.8	.4	.9
Outreach to health care providers and other organizations	.1	.3	.1	.3
Clerical tasks	28.3	68.4	25.8	61.0
Travel	3.4	8.3	3.7	8.8
Personnel tasks	.9	2.1	1.2	2.8
Accounting and finance	.1	.2	.1	.3
Vendor management	0	0	0	0
General management	4.8	11.6	7.0	16.5
Organize self/work	1.4	3.4	1.5	3.4
Miscellaneous	2.0	4.9	2.5	6.0
Total—all administrative activities	41.3	100.0	42.3	100.0
Grand total	100.0		100.0	

Note: Totals may not add due to rounding.

**Appendix V
Time Study Results - Percent of Staff time
and Staff Time Costs Spent on Activities**

Table 31: Percent of Staff Time and Staff Time Costs –Kanabec

Category/subcategory	Percent of			Staff time costs in category
	Staff time	Staff time in category	Staff time costs	
Participant services activities				
Scheduling participants	5.1	13.5	5.5	13.5
Determining participants' eligibility	4.7	12.5	5.1	12.5
Assessing participants' nutritional risk	14.9	39.3	15.9	39.3
Making referrals and conducting follow-up	.5	1.4	.6	1.4
Explaining benefits and procedures to participants	2.0	5.2	2.1	5.2
Issuing vouchers	3.5	9.2	3.7	9.2
Providing or receiving training or other professional development	<.1	.1	<.1	.1
Making record notations	7.2	18.9	7.6	18.9
Total—all participant services activities	37.9	100.0	40.5	100.0
Nutrition education activities				
Providing one-on-one nutrition education or counseling	2.4	26.5	2.6	26.5
Providing group nutrition education	0	0	0	0
Developing materials and activities	1.7	18.7	1.8	18.7
Consulting with medical providers regarding nutrition education of individual participants	.3	3.4	.3	3.4
Providing or receiving training or other professional development	4.6	51.4	5.0	51.4
Monitoring and evaluating nutrition education activities	0	0	0	0
Total—all nutrition education activities	9.0	100.0	9.7	100.0
Breastfeeding promotion and support				
Providing one-on-one breastfeeding instruction/counseling	.7	12.0	.7	12.0
Providing group breastfeeding instruction/counseling	0	0	0	0
Developing materials and activities	.1	1.0	.1	1.0
Consulting with medical providers regarding breastfeeding issues	0	0	0	0
Providing or receiving training or other professional development	4.7	87.0	5.0	87.0
Monitoring and evaluating breastfeeding promotion activities	0	0	0	0
Total—all breastfeeding promotion and support activities	5.4	100.0	5.8	100.0
Administration				
Outreach to potential participants	.5	.9	.5	1.1
Outreach to health care providers and other organizations	<.1	.1	<.1	.1
Clerical tasks	21.2	44.5	15.2	34.4
Travel	5.5	11.5	5.9	13.3

**Appendix V
Time Study Results - Percent of Staff time
and Staff Time Costs Spent on Activities**

(Continued From Previous Page)

Category/subcategory	Percent of			
	Staff time	Staff time in category	Staff time costs	Staff time costs in category
Personnel tasks	2.0	4.1	2.0	4.6
Accounting and finance	.5	1.1	.3	.8
Vendor management	.1	.2	.1	.2
General management	10.7	22.4	12.3	28.0
Organize self/work	4.2	8.8	4.5	10.1
Miscellaneous	3.1	6.5	3.3	7.5
Total—all administrative activities	47.7	100.0	44.1	100.0
Grand total	100.0		100.0	

Note: Totals may not add due to rounding.

Table 32: Percent of Staff Time and Staff Time Costs—Long Beach

Category/subcategory	Percent of			
	Staff time	Staff time in category	Staff time costs	Staff time costs in category
Participant services activities				
Scheduling participants	19.1	39.1	14.6	35.3
Determining participants' eligibility	4.3	8.9	4.1	9.9
Assessing participants' nutritional risk	9.6	19.6	9.5	22.9
Making referrals and conducting follow-up	1.1	2.2	0.9	2.2
Explaining benefits and procedures to participants	1.5	3.1	1.4	3.5
Issuing vouchers	8.6	17.7	6.5	15.6
Providing or receiving training or other professional development	.5	1.1	.2	.5
Making record notations	4.1	8.3	4.2	10.1
Total—all participant services activities	48.8	100.0	41.4	100.0
Nutrition education activities				
Providing one-on-one nutrition education or counseling	12.2	63.7	12.2	56.8
Providing group nutrition education	2.6	13.3	2.2	10.4
Developing materials and activities	2.1	10.7	3.3	15.6
Consulting with medical providers regarding nutrition education of individual participants	.1	.2	.1	.3
Providing or receiving training or other professional development	1.0	5.4	1.6	7.6

**Appendix V
Time Study Results - Percent of Staff time
and Staff Time Costs Spent on Activities**

(Continued From Previous Page)

Category/subcategory	Percent of			
	Staff time	Staff time in category	Staff time costs	Staff time costs in category
Monitoring and evaluating nutrition education activities	1.3	6.7	2.0	9.4
Total—all nutrition education activities	19.2	100.0	21.4	100.0
Breastfeeding promotion and support activities				
Providing one-on-one breastfeeding instruction/counseling	2.6	77.4	2.4	66.7
Providing group breastfeeding instruction/counseling	.1	3.8	.1	3.2
Developing materials and activities	.5	14.8	.8	22.1
Consulting with medical providers regarding breastfeeding issues	0	0	0	0
Providing or receiving training or other professional development	.1	2.6	.2	4.9
Monitoring and evaluating breastfeeding promotion activities	<.1	1.5	.1	3.1
Total—all breastfeeding promotion and support activities	3.4	100.0	3.6	100.0
Administration				
Outreach to potential participants	.8	2.7	.6	1.9
Outreach to health care providers and other organizations	.9	3.3	1.3	3.9
Clerical tasks	9.1	32.8	8.5	25.4
Travel	1.6	5.6	1.7	5.2
Personnel tasks	.8	2.7	1.1	3.3
Accounting and finance	1.6	5.6	2.3	6.8
Vendor management	.1	.1	<.1	.1
General management	8.4	29.2	11.8	35.2
Organize self/work	3.7	13.0	4.1	12.1
Miscellaneous	1.7	6.0	2.0	6.0
Total—all administrative activities	28.7	100.0	33.5	100.0
Grand total	100.0		100.0	

Note: Totals may not add due to rounding.

**Appendix V
Time Study Results - Percent of Staff time
and Staff Time Costs Spent on Activities**

Table 33: Percent of Staff Time and Staff Time Costs—York

Category/subcategories	Percent of			Staff time costs in category
	Staff time	Staff time in category	Staff time costs	
Participant services activities				
Participant services activities				
Scheduling participants	8.7	22.3	7.2	17.4
Determining participants' eligibility	5.1	13.2	6.3	15.2
Assessing participants' nutritional risk	5.5	14.1	6.9	16.6
Making referrals and conducting follow-up	.4	1.0	.3	.7
Explaining benefits and procedures to participants	1.0	2.5	1.2	2.8
Issuing vouchers	7.5	19.2	7.1	17.3
Providing or receiving training or other professional development	3.4	8.6	4.3	10.5
Making record notations	7.5	19.2	8.1	19.5
Total—all participant services activities	39.0	100.0	41.3	100.0
Nutrition education activities				
Providing one-on-one nutrition education or counseling	2.6	54.5	2.6	49.2
Providing group nutrition education	0	0	0	0
Developing materials and activities	.6	13.0	.9	16.3
Consulting with medical providers regarding nutrition education of individual participants	.5	11.1	.7	13.5
Providing or receiving training or other professional development	1.0	21.4	1.1	21.0
Monitoring and evaluating nutrition education activities	0	0	0	0
Total—all nutrition education activities	4.8	100.0	5.3	100.0
Breastfeeding promotion and support activities				
Providing one-on-one breastfeeding instruction/counseling	.4	51.9	.5	47.0
Providing group breastfeeding instruction/counseling	0	0	0	0
Developing materials and activities	.2	19.2	.2	23.0
Consulting with medical providers regarding breastfeeding issues	<.1	3.8	<.1	3.9
Providing or receiving training or other professional development	.2	25.1	.3	26.2
Monitoring and evaluating breastfeeding promotion activities	0	0	0	0
Total—all breastfeeding promotion and support activities	.8	100.0	1.0	100.0
Administration				
Outreach to potential participants	.2	.3	.3	.6

**Appendix V
Time Study Results - Percent of Staff time
and Staff Time Costs Spent on Activities**

(Continued From Previous Page)

Category/subcategories	Percent of			
	Staff time	Staff time in category	Staff time costs	Staff time costs in category
Outreach to health care providers and other organizations	.8	1.5	1.0	1.9
Clerical tasks	38.4	69.2	31.6	60.2
Travel	3.1	5.6	3.4	6.6
Personnel tasks	.4	.7	.6	1.2
Accounting and finance	.1	.2	.2	.4
Vendor management	2.5	4.5	3.2	6.1
General management	5.3	9.5	7.8	14.8
Organize self/work	.5	1.0	.7	1.3
Miscellaneous	4.3	7.7	3.6	6.9
Total—all administrative activities	55.5	100.0	52.4	100.0
Grand total	100.0		100.0	

Note: Totals may not add due to rounding.

Table 34: Percent of Staff Time and Staff Time Costs –Zuni

Category/subcategories	Percent of :			
	Staff time	Staff time in category	Staff time costs	Staff time costs in category
Participant services activities				
Scheduling participants	3.4	14.4	2.8	12.5
Determining participants' eligibility	2.7	11.4	2.3	10.3
Assessing participants' nutritional risk	2.3	9.6	3.1	13.7
Making referrals and conducting follow-up	.3	1.4	.4	1.7
Explaining benefits and procedures to participants	.1	.5	.1	.5
Issuing vouchers	5.2	21.9	4.1	18.6
Providing or receiving training or other professional development	2.4	10.2	3.8	16.9
Making record notations	7.2	30.6	5.7	25.8
Total—all participant services activities	23.6	100.0	22.3	100.0
Nutrition education activities				
Providing one-on-one nutrition education or counseling	2.8	21.7	4.3	25.9
Providing group nutrition education	4.6	35.9	5.2	31.5
Developing materials and activities	3.5	27.3	3.5	21.4

**Appendix V
Time Study Results - Percent of Staff time
and Staff Time Costs Spent on Activities**

(Continued From Previous Page)

Category/subcategories	Percent of :			
	Staff time	Staff time in category	Staff time costs	Staff time costs in category
Consulting with medical providers regarding nutrition education of individual participants	.6	4.5	.9	5.7
Providing or receiving training or other professional development	1.4	10.5	2.5	15.2
Monitoring and evaluating nutrition education activities	<.1	.2	<.1	.3
Total—all nutrition education activities	12.9	100.0	16.4	100.0
Breastfeeding promotion and support activities				
Providing one-on-one breastfeeding instruction/counseling	4.4	58.0	2.8	54.7
Providing group breastfeeding instruction/counseling	.1	1.7	.2	3.1
Developing promotion materials and activities	1.0	13.5	.8	15.0
Consulting with medical providers regarding breastfeeding issues	.3	4.2	.2	4.1
Providing or receiving training or other professional development	.8	11.0	.8	15.3
Monitoring and evaluating breastfeeding promotion activities	.9	11.6	.4	7.9
Total—all breastfeeding promotion and support activities	7.6	100.0	5.2	100.0
Administration				
Outreach to potential participants	1.0	1.7	1.1	1.9
Outreach to health care providers and other organizations	1.9	3.5	2.3	4.0
Clerical tasks	23.7	42.5	17.7	31.6
Travel	5.0	9.0	5.4	9.5
Personnel tasks	2.9	5.2	3.7	6.5
Accounting and finance	2.5	4.4	2.7	4.7
Vendor management	10.2	18.2	11.5	20.5
General management	5.4	9.7	8.0	14.2
Organize self/work	1.4	2.6	1.6	2.9
Miscellaneous	1.8	3.2	2.3	4.1
Total—all administrative activities	55.8	100.0	56.2	100.0
Grand total	100.0		100.0	

Note: Totals may not add due to rounding

Time Study Results: Approximate Minutes per Case-Month Spent on Nutrition Services and Administration Activities

This appendix presents information on the results of the time studies conducted at each of the six agencies. For participant services, nutrition education, breastfeeding promotion, and administration, the approximate number of minutes per case-month spent on specific activity categories are presented for each of the six agencies. Information on how we calculated the approximate number of minutes per case-month that was available to carry out all nutrition services and administrative activities is presented in appendix 1.

Table 35: Approximate Minutes per Case-Month Spent on Participant Services Activities at the Six Case Study Agencies

Participant service activity category ^a	Approximate minutes per case-month:					
	Gallatin	Grady	Kanabec	Long Beach	York	Zuni
Scheduling participants	4.2	1.1	1.1	3.4	2.8	2.4
Determining participants' eligibility	2.7	1.2	1.0	.8	1.6	1.9
Assessing participants' nutritional risk	4.1	2.7	3.1	1.7	1.8	1.7
Making referrals and conducting follow-up	.3	.7	.1	.2	.1	.2
Explaining benefits and procedures to participants	.4	.1	.4	.3	.3	.1
Issuing vouchers	1.6	2.4	.7	1.5	2.4	3.7
Providing or receiving training or other professional development	1.5	.3	<.1	.1	1.1	1.7
Making record notations	1.6	2.3	1.5	.7	2.4	5.2
Total—all participant services activities	16.4	10.8	8.0	8.8	12.5	17.0

Note: Totals may not add due to rounding.

^aA description of each participant service activity category is provided in appendix 1.

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Time Study Results: Approximate Minutes
per Case-Month Spent on Nutrition Services
and Administration Activities

Table 36: Approximate Minutes per Case-Month Spent on Nutrition Education Activities at the Six Case Study Agencies

Nutrition education activity category ^a	Approximate minutes per case-month:					
	Gallatin	Grady	Kanabec	Long Beach	York	Zuni
Providing one-on-one nutrition education or counseling	2.9	1.1	.5	2.2	.8	2.0
Providing group nutrition education	.2	<.1	0	.5	0	3.3
Developing education materials and activities	.3	.2	.4	.4	.2	2.5
Consulting with medical providers regarding nutrition education of individual participants	.1	.1	.1	<.1	.2	.4
Providing or receiving training or other professional development	.2	.6	1.0	.2	.3	1.0
Monitoring and evaluating nutrition education activities	.5	.2	0	.2	0	<.1
Total—all nutrition education activities	4.2	2.2	1.9	3.5	1.5	9.3

Note: Totals may not add due to rounding.

^aA description of each nutrition education activity category is provided in appendix 1.

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Time Study Results: Approximate Minutes
per Case-Month Spent on Nutrition Services
and Administration Activities

Table 37: Approximate Minutes per Case-Month Spent on Specific Breastfeeding Promotion and Support Activities at the Six Case Study Agencies

Breastfeeding promotion and support activity category ^a	Approximate minutes per case-month:					
	Gallatin	Grady	Kanabec	Long Beach	York	Zuni
Providing one-on-one breastfeeding instruction/counseling	1.4	.8	.1	.5	.1	3.2
Providing group breastfeeding instruction/counseling	<.1	.1	0	<.1	0	.1
Developing breastfeeding promotion materials and activities	<.1	.2	<.1	.1	.1	.7
Consulting with medical providers regarding breastfeeding issues	<.1	.2	0	0	<.1	.2
Providing or receiving training or other professional development	<.1	.4	1.0	<.1	.1	.6
Monitoring and evaluating breastfeeding promotion activities	<.1	.1	0	<.1	0	.6
Total—all breastfeeding promotion and support activities	1.6	1.7	1.1	.6	.3	5.5

Note: Totals may not add due to rounding.

^aA description of each breastfeeding promotion and support activity category is provided in appendix 1.

Appendix VI
Time Study Results: Approximate Minutes
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and Administration Activities

Table 38: Approximate Minutes per Case-Month on Specific Program Administration Activities at the Six Case Study Agencies

Administration activity category ^a	Approximate minutes per case-month:					
	Gallatin	Grady	Kanabec	Long Beach	York	Zuni
Outreach to potential participants	.2	.1	.1	.1	.1	.7
Outreach to health care providers and other organizations	.7	<.1	<.1	.2	.3	1.4
Clerical tasks	3.6	7.1	4.4	1.6	12.3	17.1
Travel	1.5	.9	1.2	.3	1.0	3.6
Personnel tasks	.2	.2	.4	.1	.1	2.1
Accounting and finance	.6	<.1	.1	.3	<.1	1.8
Vendor management	<.1	0	<.1	<.1	.8	7.3
General management	1.3	1.2	2.2	1.5	1.7	3.9
Organize self/work	<.1	.3	.9	.7	.2	1.0
Miscellaneous	.6	.5	.7	.3	1.4	1.3
Total—all administrative activities	8.9	10.3	10.0	5.2	17.8	40.2

Note: Totals may not add due to rounding.

^aA description of each program administration activity category is provided in appendix 1.

GAO Contacts and Staff Acknowledgments

GAO Contacts

Robert E. Robertson (202) 512-5138
Thomas E. Slomba (202) 512-9910

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