

July 2006

WIC PROGRAM

More Detailed Price and Quantity Data Could Enhance Agriculture's Assessment of WIC Program Expenditures





Highlights of [GAO-06-664](#), a report to congressional requesters

Why GAO Did This Study

The Special Supplemental Nutrition Program for Women, Infants and children (WIC), authorizes retail grocers, called regular WIC vendors, to provide the food benefit. Recently, some states have seen an increase in vendors called WIC-only vendors, who stock only WIC food and accept only WIC vouchers. Both vendor types accept WIC vouchers in exchange for a cash payment, or redemption, from WIC state agencies with U.S. Department of Agriculture (USDA) grant funds. To determine what effect WIC-only vendors' growth would have on program expenditures, in the absence of recent cost containment legislation, you asked GAO (1) what is known about WIC-only vendors' growth and their share of the WIC market in recent years, (2) to what extent do WIC-only and regular WIC vendors differ, and (3) what would WIC-only vendors' contribution to WIC program expenditures have been, if their market share increased. GAO analyzed national WIC vendor data, interviewed WIC state officials about vendors' business practices, and analyzed redemption data from California, Texas and Florida.

What GAO Recommends

GAO recommends that the USDA Secretary require, if collecting detailed information on WIC food purchases is cost-effective through electronic benefits transfer, that WIC state agencies collect data on the price and quantity of each food item purchased. USDA generally agreed with our findings.

www.gao.gov/cgi-bin/getrpt?GAO-06-664.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Cynthia Fagnoni at (202) 512-7215 or fagnonic@gao.gov.

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What GAO Found

The number of WIC-only vendors has tripled since 1999, with growth concentrated in a few states. However, WIC-only vendors' share of the national WIC market was relatively small compared to that of regular WIC vendors in 2004. Nationally, WIC-only vendors increased in number from 394 in 1999 to 1,180 in 2004, but 84 percent of these vendors are in California, Texas, and Florida. Despite their growth, WIC-only vendors accounted for 3 percent of all WIC vendors nationwide, and their market share, that is, their percentage of all WIC redemptions nationally, was on average 6 percent in 2004. Because of limitations in the data, we were unable to calculate annual growth rates or analyze changes in market share over time.

WIC-only and regular WIC vendors generally employed different business and marketing practices, largely in response to the two different customer groups they served, according to WIC state agency officials. Because WIC participants are not required to consider retail prices, WIC-only vendors competed for participants' business by emphasizing customer service, which participants seemed to value. On the other hand, regular WIC vendors served non-WIC consumers as well as WIC participants. Because these non-WIC consumers are price sensitive, regular WIC vendors competed for their business based on price and competitors' behavior. An important difference in these approaches was that because WIC participants were not price sensitive, they might choose the service offered by WIC-only vendors, regardless of price. Finally, WIC-only and regular WIC vendors used similar food purchasing practices, because the cost of food purchased for resale is related more to the volume purchased than to the type of vendor purchasing the food. Both WIC-only and regular WIC vendors were able to lower the average cost of food purchased for resale when they bought in volume, according to WIC state agency officials.

If WIC-only vendors' market share in 2004 had doubled in California, Texas, and Florida, either about 3 percent—about 136,000—fewer participants could have been served in each state, or program food expenditures would have increased about 3 percent—about \$50 million—according to our scenario estimates. The average value of all vouchers redeemed by WIC-only vendors in 2004 was higher than the average value of all vouchers redeemed at regular WIC vendors. Thus, if the number of vouchers redeemed by WIC-only vendors had increased and state food expenditures remained at 2004 levels, fewer vouchers could have been issued, and fewer participants served. Conversely, if the number of vouchers issued remained at 2004 levels, the higher average value of vouchers redeemed at WIC-only vendors would have resulted in increased program expenditures. However, the price and quantity of the individual food items that make up the vouchers were not available to us; therefore we could not determine if the higher average value of vouchers meant that prices for individual food items were higher at WIC-only vendors. Making price comparisons would require food item price and quantity data for both WIC-only and regular WIC vendors, at a minimum.

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Abbreviations

EBT	electronic benefits transfer
FNS	Food and Nutrition Service
GIS	geographic information system
IOM	Institute of Medicine
ITO	Indian Tribal Organization
MSA	metropolitan statistical area
TIP	The Integrity Profile
USDA	U.S. Department of Agriculture
WIC	Special Supplemental Nutrition Program for Women, Infants, and Children

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United States Government Accountability Office
Washington, DC 20548

July 28, 2006

The Honorable Tom Harkin
Ranking Democratic Member
Committee on Agriculture, Nutrition and Forestry
United States Senate

The Honorable Herb Kohl
Ranking Democratic Member
Subcommittee on Agriculture, Rural Development and Related Agencies
Committee on Appropriations
United States Senate

Each month, the Special Supplemental Nutrition Program for Women, Infants, and Children, better known as WIC, provides nutritious food, nutrition education, and referrals to health care to more than 8 million low-income women, infants, of Agriculture's (USDA) Food and Nutrition Service (FNS) through WIC state and local agencies that implement the program and manage the food delivery system. WIC is a discretionary program, as Congress does not set aside funds to allow every eligible individual to participate, and was funded at a level of more than \$5 billion in fiscal year 2005.

In most states, WIC participants receive vouchers to exchange for food from authorized retail grocery stores that are known as WIC vendors in the program.¹ These vouchers provide participants with a prescribed type and quantity of supplemental WIC foods tailored to their health needs, such as infant formula, milk, and peanut butter. Participants generally are not required by the federal WIC program to obtain all items on a voucher. However, they may not use the voucher to purchase items that are not listed on it. Because participants receive food in exchange for their vouchers, without exchanging any cash, their purchasing decisions are not price sensitive, that is, they do not need to consider the prices WIC

¹WIC participants may receive benefits in the form of checks or vouchers, also called food instruments by the WIC program. We refer to both forms as vouchers for the purposes of this report.

vendors charge for the items.² The vendors, which include independent stores as well as national and local chains, accept the vouchers and exchange them for a cash payment, or redemption, from the WIC state agency. Until recently, retail grocery stores that commonly carry a variety of foods including supplemental WIC foods—or regular WIC vendors, as they are referred to in this report—represented 98 percent or more of the stores each WIC state agency authorized as WIC vendors. However, beginning in about fiscal year 2000, some WIC state agencies noticed an increase in another type of authorized vendor in the WIC vendor market, one that sells only WIC-authorized food items to program participants and accepts only WIC vouchers. Prior to changes introduced by the Child Nutrition and WIC Reauthorization Act of 2004, these vendors were called WIC-only vendors.³ With data reported by the WIC state agencies, FNS has tracked WIC-only vendors' redemptions since 1998, but little else is known at the national level about the percentage of total WIC redemptions that WIC-only vendors are receiving, that is, their market share, or about their business practices.

Questions have been raised about whether WIC-only vendors charge higher prices than other vendors and therefore will place a higher demand on overall program expenditures over time. If so, the WIC program may need to restrict program participation or seek additional funding. Concerned about the potential consequences of increasing claims on program funds, in fiscal year 2004, Congress established cost containment provisions to ensure that the WIC program is not charged more for food items obtained at WIC-only vendors than it would be for the same items at regular WIC vendors.⁴ Also, in fiscal year 2005, Congress prohibited the

²While the WIC program generally does not require participants to pay attention to vendor prices, some WIC state agencies, such as that of Texas, for example, require WIC participants to obtain the least expensive brand of certain items (e.g., juice) with their voucher.

³The Child Nutrition and WIC Reauthorization Act of 2004, Pub. L. No. 108-265 (2004), created a new category of vendors referred to as above 50 percent vendors, vendors whose revenue from the sale of WIC food is more than half of their annual revenue from food sales, as part of an overall cost containment strategy. This new category includes WIC-only vendors. In this report, we used the definitions established by FNS prior to the changes brought by the reauthorization because those definitions conform to the redemption data provided by FNS and WIC state agencies for our analyses.

⁴The Child Nutrition and WIC Reauthorization Act of 2004 established cost containment provisions that require WIC state agencies to implement a vendor peer group system that groups stores according to similar characteristics in a way that ensures that all authorized vendors are paid competitive prices for WIC food.

payment of administrative funds to any state agency that authorized any new WIC-only vendors, unless deemed necessary to ensure participant access, for 2 years.⁵ To determine what the effect of WIC-only vendors' growth on WIC program expenditures would have been without the recent cost containment changes and the prohibition on authorizing new vendors, and to better understand how they do business, you asked us (1) what is known about WIC-only vendors' growth and their share of the WIC market in recent years, (2) to what extent do the business and marketing practices of WIC-only and regular WIC vendors differ, and (3) what would WIC-only vendors' contribution to WIC program expenditures have been if their market share increased.

To find out what is known about WIC-only vendors' growth and their share of the WIC market in recent years, we analyzed data from FNS's administrative data files on the national WIC vendor population—The Integrity Profile (TIP)—for fiscal years 1999-2004 to determine the number and distribution of WIC-only vendors. We focused exclusively on data from the 50 states and the District of Columbia, and excluded from our analysis any vendor type other than WIC-only vendors and regular WIC vendors.⁶ To determine WIC-only vendors' share of the WIC market, we analyzed redemption data for an average month in fiscal year 2004 from FNS's regional office files.⁷ However, because TIP does not record when vendors enter or exit the WIC program, but instead records any vendor that participated in WIC during the fiscal year, it may overstate the number of vendors in operation at any point in time. As a result, we calculated the number of WIC-only vendors in the program each year, but we were unable to determine percentage-based growth from year to year. In addition, because national redemption data for fiscal years 1999-2004 did not meet GAO's data reliability standards, we could not use these data to

⁵The Consolidated Appropriations Act of 2005, Pub. L. No. 108-447 (2004). The prohibition applied to those WIC vendors expected to derive 50 percent or more of their annual revenue from WIC vouchers. This prohibition was extended for fiscal year 2006, and the President's fiscal year 2007 budget proposal seeks a continuation of this prohibition through the fiscal year.

⁶Vendor types excluded from our analysis include military commissaries and pharmacies. See the background section for more information on these vendor types.

⁷Most redemption data from WIC state agencies were reported as average monthly redemptions in fiscal year 2004. According to FNS, this amount may represent either the average monthly value of WIC vouchers over a 3-6 month period or a recent month that accurately reflects a vendor's normal redemptions. See appendix I for additional information.

analyze changes in WIC-only vendors' share of the WIC market over time. However, the fiscal year 1999-2004 TIP data on the number of vendors and FNS regional office redemption data were sufficiently reliable for our purposes.⁸

To determine the difference in WIC-only vendors and regular WIC vendors' business and marketing practices, we interviewed WIC state agency officials in seven of the eight states that had authorized more than 10 WIC-only vendors in fiscal year 2004: Alabama, Arkansas, California, Florida, Georgia, North Carolina, and Texas.⁹ To complement these telephone interviews, we visited 4 WIC-only vendors and 4 regular WIC vendors in California, Texas, and Florida, for a total of 24 site visits. Our vendor selection criteria included urban and rural locations, years in operation, and redemption practices. WIC state officials' accounts and the site visits to vendors provided insight into the distinctions in WIC-only and regular WIC vendors' business behavior, but were not quantifiable or applicable beyond the states and vendors they represented.

To calculate the contribution of WIC-only vendors to WIC program expenditures, we obtained administrative data from the California, Texas, and Florida WIC state agencies on the redemption value for every voucher redeemed in those states in fiscal year 2004. We selected these three states because they represent more than 80 percent of the national WIC-only vendor market. Because we needed data on both the price and the quantity of WIC food items purchased from WIC-only and regular WIC vendors to isolate the effect of WIC-only vendors' prices on program expenditures, and both of those data elements were not available from any existing data

⁸See the discussion of our data reliability assessment procedures in appendix I.

⁹Because of Hurricane Katrina, Louisiana, one of the states with more than 10 WIC-only vendors, was not included.

source, we developed a scenario analysis that used redemption data.¹⁰ We used the redemption data to determine the actual number of vouchers redeemed and to calculate the average value of all vouchers redeemed in each of the states by WIC-only and by regular WIC vendors. We applied the number of vouchers redeemed and the average value of all vouchers redeemed to the scenario analysis to estimate the effect on program participation and expenditures of successive increases in WIC-only vendors' market share. However, because redemption data do not break out the price and quantity of the individual food items on each voucher, we could not determine whether prices of individual food items were higher at WIC-only vendors than at regular WIC vendors. Thus, even though we were able to calculate the average value of all vouchers redeemed by both types of vendors, we were not able to explain why the values may have been different.

Appendix I provides a detailed description of our methodology and its limitations. We conducted our work from April 2005 through June 2006 in accordance with generally accepted government auditing standards.

Results in Brief

The number of WIC-only vendors has grown substantially in recent years. However, their location is concentrated in a few states, and their share of the national WIC market remained small in 2004. The number of WIC-only vendors in operation at any point during the fiscal year increased from 394 in 1999 to 1,180 in 2004. WIC-only vendors are concentrated geographically: in 2004, 84 percent of all WIC-only vendors operated in California, Texas, or Florida, home to nearly a third of all WIC participants. Moreover, nearly half were located within three metropolitan

¹⁰The California, Texas, and Florida WIC state agencies periodically collect data on WIC vendors' shelf prices, but they do not collect data on both the price actually charged and the quantity of each WIC food item purchased with each WIC voucher. The California and Texas WIC state agencies maintain the shelf price data they collect during vendor monitoring visits in paper records and do not enter it into the automated management information systems they use to monitor vendors' redemption claims. The Florida WIC state agency transfers the shelf price data it collects during monitoring visits to an EXCEL spreadsheet but does not incorporate these data into the state agency management information system. The California WIC state agency also sponsored a survey in fiscal year 2003 that collected shelf price data from a random sample of the state's WIC vendors, but this survey did not collect data on food item purchases. The Texas WIC state agency is currently conducting a pilot project for electronic benefits transfer (EBT) in selected areas of the state that collects WIC transaction data, including the type of food item purchased, the quantity purchased and the price paid, and stores it electronically in the EBT system. These data may be useful for future research.

areas: Los Angeles, California; Riverside, California; and Miami, Florida. Notwithstanding the increase in WIC-only vendors, in 2004 they represented only 3 percent of the approximately 45,000 WIC vendors nationwide. Although we could not determine the growth of WIC-only vendors' market share over time, WIC-only vendors generated 6 percent of business in the WIC market on an average monthly basis in 2004, compared to the 94 percent generated by regular WIC vendors. However, on an individual store basis, WIC-only vendors redeemed about twice the monthly average redemption value of regular WIC vendors.

WIC-only and regular WIC vendors used different business models, reflecting, for the most part, the different customer groups they served, according to WIC state agency officials. Because WIC participants are not price sensitive, WIC-only vendors competed for their business by structuring their stores to emphasize customer service, which participants seemed to value. For example, to simplify the WIC food purchase, officials pointed out that WIC-only vendors often gathered the food items listed on the voucher for WIC participants from food maintained behind a counter. This practice eliminated the stigma participants may feel because of backups in regular WIC vendors' checkout lines when they select an unauthorized food item. WIC-only vendors, we were told, also tended to locate near WIC clinics, places that were very accessible to WIC participants. However, regular WIC vendors, who served non-WIC consumers as well as WIC participants, focused their businesses on their non-WIC customers, state officials told us. Because these non-WIC consumers are price sensitive, regular WIC vendors competed for their business based on price and competitors' behavior. For example, regular WIC vendors made location decisions based on their broader customer base and often used price-based incentives, such as "buy-one-get-one-free" offers, specials, or discount cards to appeal to their non-WIC, price sensitive customers. An important difference in these approaches was that because WIC participants were not price sensitive, they might take advantage of the service offered by WIC-only vendors, even if their prices were somewhat higher. In contrast to the vendors' different customer service and marketing practices, state officials told us that both WIC-only and regular WIC vendors are able to lower the average cost of food they purchase for resale when they buy in volume, according to a majority of WIC state agency officials interviewed, by expanding from one outlet to a chain or forming consortia. However, we did not analyze the effect of decreasing food-purchasing costs on WIC-only and regular WIC vendors' food prices.

If WIC-only vendors' market share in 2004 had doubled in California, Texas, and Florida, either program participation would have decreased by about 3 percent—about 136,000 participants—or program food expenditures would have increased about 3 percent—about \$50 million—according to our scenario estimates. Our estimates showed that the average value of all vouchers redeemed by WIC-only vendors in 2004 was higher than the average value of all food vouchers redeemed at regular WIC vendors: \$0.87 higher in California, \$9.83 higher in Texas, and \$4.42 higher in Florida. As a result, if the number of food vouchers redeemed by WIC-only stores had increased and total expenditures remained fixed at 2004 levels, fewer vouchers could have been issued and fewer participants could have been served. Conversely, if the total number of vouchers issued to participants remained at the 2004 level, the higher average value of vouchers redeemed at WIC-only vendors' would have resulted in increased program expenditures. However, because we used the average value of all food vouchers in our analysis without knowing the price or quantity of the individual food items that made up the vouchers, we could not determine if the higher average value meant that prices for individual food items were higher at WIC-only vendors. WIC-only vendors' higher average value of redeemed vouchers could mean that they charge higher prices for WIC food but could also mean that WIC-only vendors' customers are more likely to select all of the food items on their vouchers. Making price comparisons would require both food item price and quantity data for WIC-only and regular WIC vendors, at a minimum.

To assist WIC state agencies in more effectively monitoring WIC vendors' redemption practices, in implementing the new cost containment requirements, and in analyzing program expenditures, we are recommending that the Secretary of Agriculture require, if collection of more detailed information on WIC food purchases is cost-effective through electronic benefits transfer (EBT) implementation, that WIC state agencies collect data on both the price and the quantity of each WIC food item purchased, especially in each state that authorizes WIC-only vendors. In oral comments on a draft of this report, FNS officials generally agreed that our methodology was reasonable, given data limitations, and did not dispute our findings. However, officials did not believe that the small-scale study we recommended in the draft they read would be cost-effective or necessary, because of the difficulty in collecting price and quantity data under the current system and because state agencies already are required to collect shelf price data and redemption data from authorized vendors. We acknowledged that USDA's research funds are limited and that its research agenda is full. However, we maintained that because the cost containment provisions are complex, it is important for

FNS to monitor state agencies' implementation of the provisions closely, to help ensure that program expenditures are in fact contained. In response, we removed our recommendation for further study and further clarified our recommendation for collection of data on both the price and the quantity of WIC food items purchased under a cost-effective EBT system.

Background

WIC aims to protect the health of low-income women, infants, and young children who are at nutritional risk by providing nutritious foods to supplement diets, information on healthy eating, and referrals to health care at no charge to participants. Permanently established in 1974, WIC serves more than 8 million participants each month, including women who are pregnant, postpartum, or breastfeeding; infants under the age of 1; and children under the age of 5, the largest category of participants. To participate in the program, eligible applicants must meet income guidelines, be deemed nutritionally at risk by a health professional (e.g., having a poor diet, low weight, or anemia), and must apply in the state in which they reside.

In fiscal year 2005, the federal government spent over \$5 billion on WIC. WIC is not an entitlement program that allows every eligible individual to participate; rather, it is a federal discretionary grant program for which Congress authorizes a specific amount of funds each year. At the federal level, WIC is administered by FNS, which provides grants to WIC state agencies for food and for nutrition services and administration. The nutrition services and administration grant covers the cost of certifying participants and determining nutrition risks; providing outreach and nutrition education services, including breastfeeding promotion; and printing vouchers and administering the food delivery system. FNS also determines WIC program policy and guidance, provides technical assistance to the WIC state agencies and sponsors research on program issues. In turn, WIC state agencies operate the program through thousands of local agencies and clinic sites. The 90 WIC state agencies include 50 state health departments, as well as those of the District of Columbia, 34 Indian Tribal Organizations, and five U.S. territories (Northern Mariana, American Samoa, Guam, Puerto Rico, and the Virgin Islands).

How the Retail Food Delivery System Works

In most WIC state agencies, WIC participants receive vouchers to purchase supplemental food in appropriate amounts tailored to their health needs from authorized retail stores, known as vendors in the WIC program.¹¹ Vouchers prescribe food that is high in nutrients found to be lacking in a participant's diet, such as milk, cereal, and eggs, and are adapted from a set of federally established food packages that differ according to participant type (e.g., infants or pregnant woman). Each WIC state agency designs its own vouchers and usually issues vouchers that contain a combination of WIC food items. For example, one frequently used voucher contains eggs, juice, cereal, cheese, milk, and beans. However, some vouchers contain only one food item, such as formula or cereal. (See app. IV.) Most participants receive multiple vouchers each month for all of the food they are prescribed. However they may not use the voucher to purchase items that are not listed on it. Figure 1 shows a sample voucher for food items from California's WIC state agency.

¹¹WIC state agencies may also operate other, less prevalent food delivery systems, including home food delivery systems, in which authorized supplemental foods are delivered to the participant's home, and direct distribution food delivery systems, in which participants, or their proxies, collect authorized supplemental foods from storage facilities operated by the state agency or its local agency.

Figure 1: Sample Voucher from California

INDIVIDUAL NO.	PARTICIPANT/ PARENT/GUARDIAN	FIRST DAY TO USE	LAST DAY TO USE	SERIAL NO.
113214683RR	PAULA PARTICIPANT	JUNE 12 04	JULY 11 04	476978438

WIC PROGRAM
State of California

Pay to the order of: 326476

BOB'S QUICK SHOP # 119
1661 SHORE ROAD
WOOD CITY CA 95231

MILK/CHEESE /EGG

Kind to buy:
* MILK-COW, FLUID PASTEURIZED (GALLONS ONLY)
* CHEESE-CHEDDER, JACK, AMERICAN, MOZZARELLA IN 0.75 LB (12OZ.) OR LARGER
* EGGS-AA WHITE, SM,MD,LG,UP TO:

How much to buy:
2 GALLONS MILK, 2DOZ EGGS (DOZENS ONLY) 2 LBS CHEESE

70-12-31
1009

EXACT PURCHASE PRICE:
17 95

MUST NOT EXCEED
\$ 20 . 97

PAULA PARTICIPANT
AUTHORIZED SIGNATURE (SIGN AT PURCHASE)

800-6229012572

1 Each person's ID number

2 The family name

3 First day voucher can be used

4 Last day voucher can be used

5 Name and address of the store

6 The kinds of food that can be purchased with voucher

7 The amount of food participant can purchase with voucher (Participant can purchase only up to this amount)

8 The actual price of purchase with voucher (cashier fills in at checkout stand)

9 The price of food purchased can be only up to noted amount

10 Participant signs name as cashier observes

Source: California Department of Health.

Unlike some other food assistance program models, WIC vouchers do not provide an incentive for program participants to consider vendor prices for supplemental foods. For example, the Food Stamp and WIC Farmers' Market Nutrition Programs generally provide electronic benefits or

coupons that are used like cash at grocery stores or through farmers, and which encourage participants to make cost-conscious decisions regarding food choices. In contrast, because WIC participants purchase supplemental foods with vouchers that prescribe the type and quantity of foods a participant may receive, regardless of the prices charged by vendors to the WIC program, WIC participants are not price sensitive, that is, participants do not have an incentive to purchase their food benefit from lower-priced vendors.¹²

The approximately 45,000 vendors in the WIC program accept vouchers and exchange them for cash payment—or redemption—from their WIC state agency. Vendors are subject to price limitations, often in the form of an overall maximum, not-to-exceed amount for each voucher, determined by WIC state agencies. As shown in figure 1, a state may clearly print the not-to-exceed amount for the total amount charged on the voucher.

Like other retail grocery stores, WIC vendors sell to participants small quantities of food items that they typically purchase from manufacturers, wholesalers, or, on occasion, other retailers. The methods that grocery stores use to purchase food items are important business practices, because the cost of buying goods for resale is the largest single expense for an average grocery store, according to Food Marketing Institute research.¹³

How WIC Vendors Are Managed

Through regulation and program guidance, FNS provides broad oversight to WIC state agencies on cost containment and vendor management. FNS provides the food grant that state agencies use to reimburse vendors for redeemed vouchers, gathers program integrity data, supports upgrades to states' management information systems, and sponsors research on vendor management issues. Because federal legislation grants primary responsibility for WIC vendor management to the WIC state agencies, WIC state agencies have considerable flexibility in designing and implementing their vendor management systems. FNS regulations require that WIC state agencies' vendor management systems include six areas of activity:

¹²The total amount charged for a voucher is monitored and assessed for reimbursement by WIC state agencies.

¹³Food Marketing Institute, *Marketing Costs* (Washington, D.C.), http://www.fmi.org/facts_figs/superfact.htm (downloaded March 29, 2006).

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- *authorization and reauthorization*—The authorization process begins with a vendor’s application and an on-site visit by WIC state agency staff to verify the information provided in the application. Authorized vendors must enter into a written agreement, which may be reauthorized, usually every 1-3 years.
 - *training*—WIC state agencies train vendor staff on the purpose of the WIC program and program procedures such as accepting vouchers from participants at the point of sale.
 - *representative monitoring*—State agencies are required to conduct routine monitoring visits of at least 5 percent of their vendors annually to observe vendor and participant transactions and collect shelf prices to ensure they are within the required state limits.
 - *voucher review and redemption*—State agencies are required to develop and implement an edit system of the vouchers turned in for redemption to detect noncompliance with program regulations. The redeemed-voucher review includes checking that charges for food items do not go over the not-to-exceed payment amount for vouchers, set by the state, and other edits such as transactions or redemptions outside of valid dates.
 - *high-risk vendor monitoring*—WIC state agencies identify high-risk vendors through on-site monitoring visits or through the redemption system and must investigate a minimum of 5 percent of vendors meeting high-risk criteria, such as high rates of redemption at or near the not-to-exceed payment amount for vouchers.
 - *sanctions*—State agencies may impose sanctions ranging from fines to disqualification on vendors that violate program requirements or may impose a civil money penalty when a disqualification would result in inadequate participant access. A temporarily disqualified vendor may reapply after the disqualification period has expired.

How Vendor Management in the WIC Program Has Evolved

In the past few years, the WIC program has initiated significant changes in vendor management practices to contain costs and maximize the number of eligible women, infants, and children that can receive benefits. Prior to fiscal year 2004, FNS characterized authorized WIC vendors that participate in the program as:

-
- *retail grocery stores*—vendors that commonly stock a variety of foods, including supplemental WIC foods, and serve a wide variety of customers, referred to as regular WIC vendors in this report;
 - *WIC-only vendors*—vendors that stock only WIC-approved food and accept only WIC vouchers;
 - *military commissaries*—vendors located on military installations and designed for military families; and
 - *pharmacies*—vendors that only provide infant formula, exempt infant formula, or WIC-eligible medical foods.¹⁴

The Child Nutrition and WIC Reauthorization Act of 2004¹⁵ established new cost containment provisions designed, in part, to ensure that the WIC program is not charged more for the same supplemental food items provided in exchange for vouchers that participants might use at WIC-only vendors instead of at regular WIC vendors. These cost containment provisions require state agencies to implement a vendor peer group system that groups stores according to similar characteristics, such as vendor size and geographic location, in a manner that ensures that the WIC program pays all authorized vendors competitive prices for supplemental foods. FNS expects to complete certification of states' plans for cost containment by September 2006.

One cost containment provision created a new category of vendors referred to as above 50 percent vendors, which include any vendor whose revenue from the sale of WIC supplemental food is more than half of its annual revenue from food sales.¹⁶ In addition, the Act prohibited above 50 percent vendors from providing any incentive items, such as free diapers, detergent, baby strollers, or bicycles, to participants unless the incentives are of nominal value or were obtained at no cost. On November 29, 2005, USDA issued an interim rule, effective on December 29, 2005, that incorporated the cost containment provisions of the Act into program regulations that are applicable to WIC state agencies.¹⁷ To help ensure that

¹⁴Exempt infant formulas are designed for infants with specific medical or dietary problems. Similarly, WIC-eligible medical foods are considered medically necessary and are prescribed by a physician when conventional foods cannot be consumed by women or children with special dietary needs.

¹⁵The Child Nutrition and WIC Reauthorization Act of 2004, Pub. L. No. 108–265 (2004).

¹⁶However, we used the WIC-only vendor definition established by FNS prior to the changes brought by the reauthorization because those definitions conform to the redemption data provided by FNS and WIC state agencies for our analyses.

¹⁷70 Fed. Reg. 71,708 (Nov. 29, 2005).

vendors' prices are competitive, these regulations require states to collect and review vendors' shelf prices at least every 6 months after authorization. The regulations also require state agencies to compare the average cost of each type of food instrument redeemed by WIC-only vendors against the average cost of the same type of food instrument redeemed by regular vendors.

In December of 2005, attorneys representing an association of WIC-only vendors and three food companies, the plaintiffs, filed an action in federal district court for the District of Columbia to stop implementation of FNS's regulations. Arguing that the regulations were contrary to the Act and to congressional intent, the plaintiffs asserted that the cost containment provisions concerning above-50-percent vendors would reduce their WIC reimbursements to a level that would be unsustainable. In describing services that WIC-only vendors offered WIC participants, the plaintiffs characterized WIC-only vendors as small businesses and acknowledged that their cost of doing business was higher than that of large stores, referred to as box stores, that purchased food in high volume at discount prices. The plaintiffs estimated that WIC-only vendors' prices were about 8 to 15 percent higher than prices charged at box stores, on average. On February 23, 2006, the court dismissed the case, finding that the cost containment provisions of the interim rule were consistent with the plain language and purpose of the Act.¹⁸

Recent initiatives suggest that more changes to the WIC program are forthcoming. In 2003, FNS developed a plan to transform WIC from its paper-based food benefit delivery system to an electronic benefits transfer system. Through pilot projects in many states that are still under way, FNS is working toward a national model that is both technically and financially viable for implementation of EBT by 2008. In addition, in 2004 the Institute of Medicine (IOM) began examining WIC food packages to determine if modification could help participants eat a healthier diet. In its 2005 report, IOM recommended revisions to the food packages that match current dietary guidance for infants and young children, encourage consumption of fruits and vegetables, emphasize whole grains, lower saturated fat, and appeal to diverse populations.¹⁹

¹⁸*National Women, Infants and Children Grocers Association v. Food and Nutrition Service*, 416 F.Supp. 2d 92 (D.D.C. 2006).

¹⁹See the Institute of Medicine, *WIC Food Packages: Time for a Change*, National Academies Press: Washington, D.C., 2006, for more information.

WIC-Only Vendors Increased in Number during Fiscal Years 1999-2004, although Their Market Share Remained Relatively Small in Fiscal Year 2004

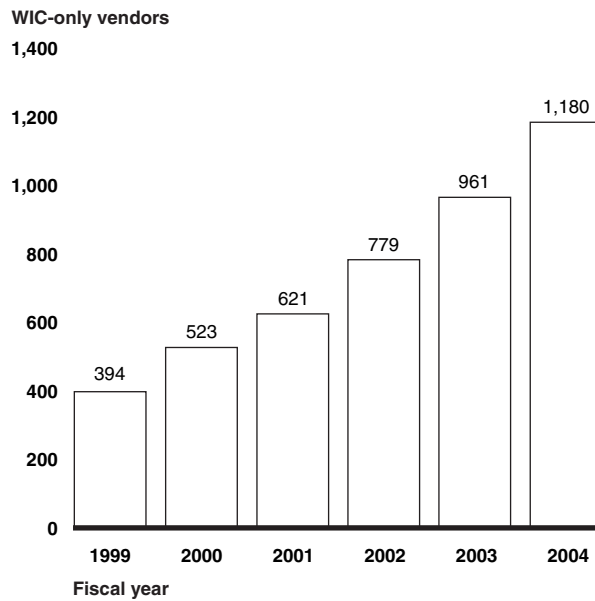
Since 1999, WIC-only vendors have increased in number, with concentrated growth in a few states, but their share of the national WIC market stayed small in comparison to the share of regular WIC vendors during an average month in 2004. The number of WIC-only vendors nationwide tripled from 1999 to 2004, and the number of states with WIC-only vendors also grew over this period. Notwithstanding these increases, in 2004 the majority of WIC-only vendors were located in California, Texas, and Florida, and nearly half of all WIC-only vendors operated in a few metropolitan areas within these states. Nationwide, WIC-only vendors still accounted for about 3 percent of all WIC vendors in 2004 and generated about 6 percent of business in the WIC market during an average month that year, compared to regular WIC vendors' predominant market share. On a store-by-store basis, however, WIC-only vendors' redemption value was greater, on average, than regular WIC vendors' during this period.

WIC-Only Vendors Tripled from Fiscal Year 1999 to Fiscal Year 2004, and They Are Highly Concentrated Geographically

The 1,180 WIC-only vendors in operation at any point during 2004 were three times the number in business at any point in 1999 (see fig. 2).²⁰

²⁰TIP does not record when vendors enter or exit the WIC program, and therefore may overstate the number of vendors in operation on any particular date. See appendix I for a more detailed explanation of the data limitations created by this issue.

Figure 2: National Total of WIC-Only Vendors



Source: GAO analysis of FNS 1999-2004 TIP files.

Note: Vendor counts include any vendor in operation at some point during the fiscal year.

Just as the total number of WIC-only vendors has increased, the number of states with WIC-only vendors has grown in recent years. Of the 50 states and the District of Columbia, 15 had WIC-only vendors in 2004, an increase from 12 in 1999 (see table 1).²¹

²¹ States may have had WIC-only vendors in 1999 that they did not report in TIP. As one example, Georgia did not identify WIC-only vendors as a separate vendor type until 2004. Appendix II presents the number of WIC-only vendors by state for all fiscal years from 1999 through 2004.

Table 1: Number of WIC-Only Vendors by State, Fiscal Years 1999 and 2004

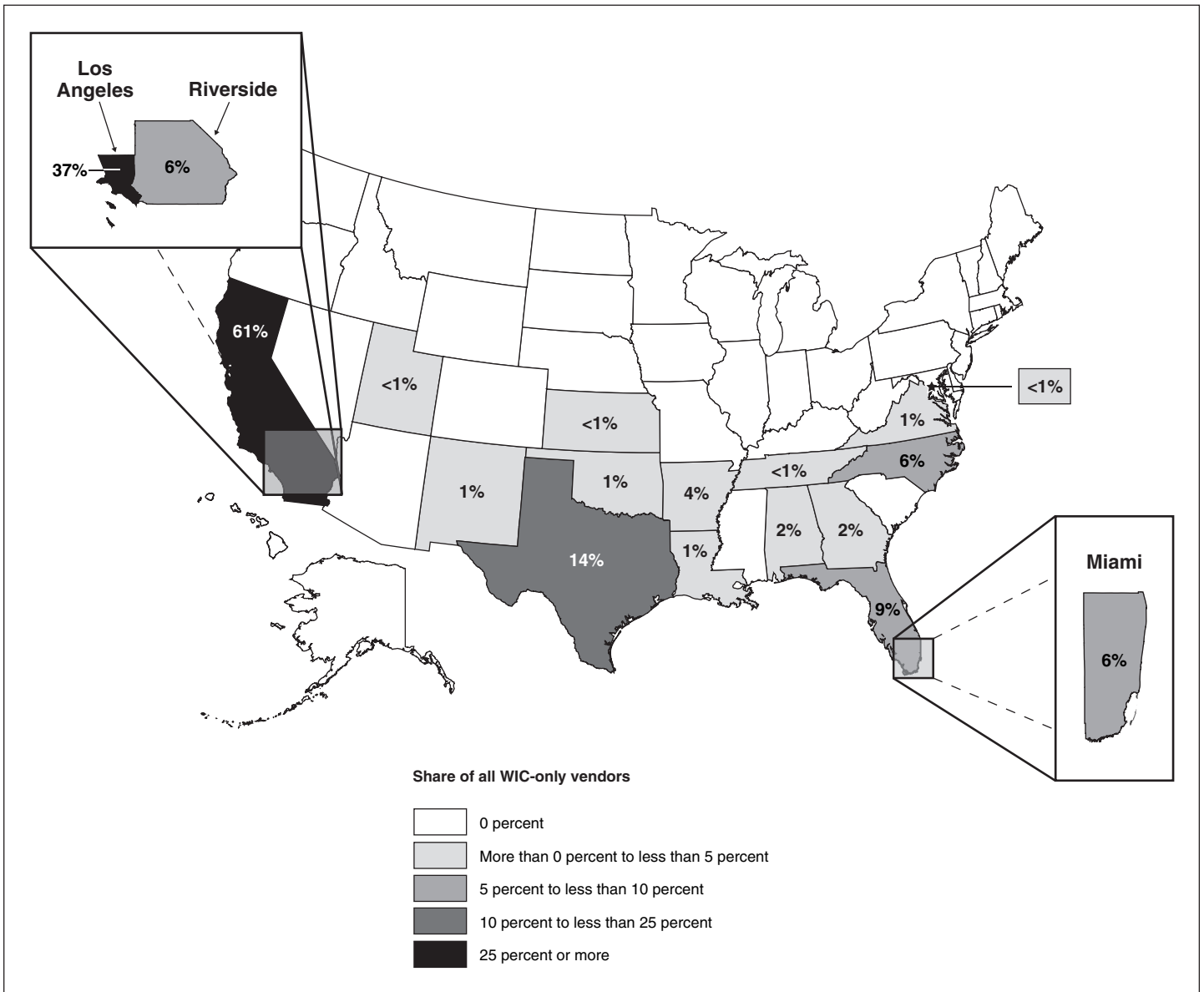
State	1999	2004
California	235	715
Texas	69	162
Florida	57	109
North Carolina	2	72
Arkansas	4	42
Georgia	0	22
Alabama	0	19
Louisiana	4	11
Oklahoma	5	8
New Mexico	4	7
Virginia	5	6
Kansas	0	3
Utah	2	2
District of Columbia	0	1
Tennessee	2	1
Oregon	5	0
Total	394	1,180

Source: GAO analysis of FNS 1999 and 2004 TIP data.

Note: Vendor counts include any vendor in operation at some point during the fiscal year. Any state not listed had no WIC-only vendors authorized during either fiscal year.

Even with the increase in recent years in both total WIC-only vendors and the number of states with such vendors, in 2004 most WIC-only vendors were located in three states, and nearly half operated in three metropolitan areas. Figure 3 shows that, at the national level, 84 percent of all WIC-only vendors operated in California, Texas, or Florida. Moreover, approximately one out of every two WIC-only vendors nationwide operated in Los Angeles, California; Riverside, California; or Miami, Florida. In contrast, each of the remaining states with WIC-only vendors accounted for less than 7 percent of total WIC-only vendors in 2004.

Figure 3: Share of Total WIC-Only Vendors Nationwide by State and the Top Three Metropolitan Areas in 2004



Source: GAO analysis of FNS 2004 TIP file.

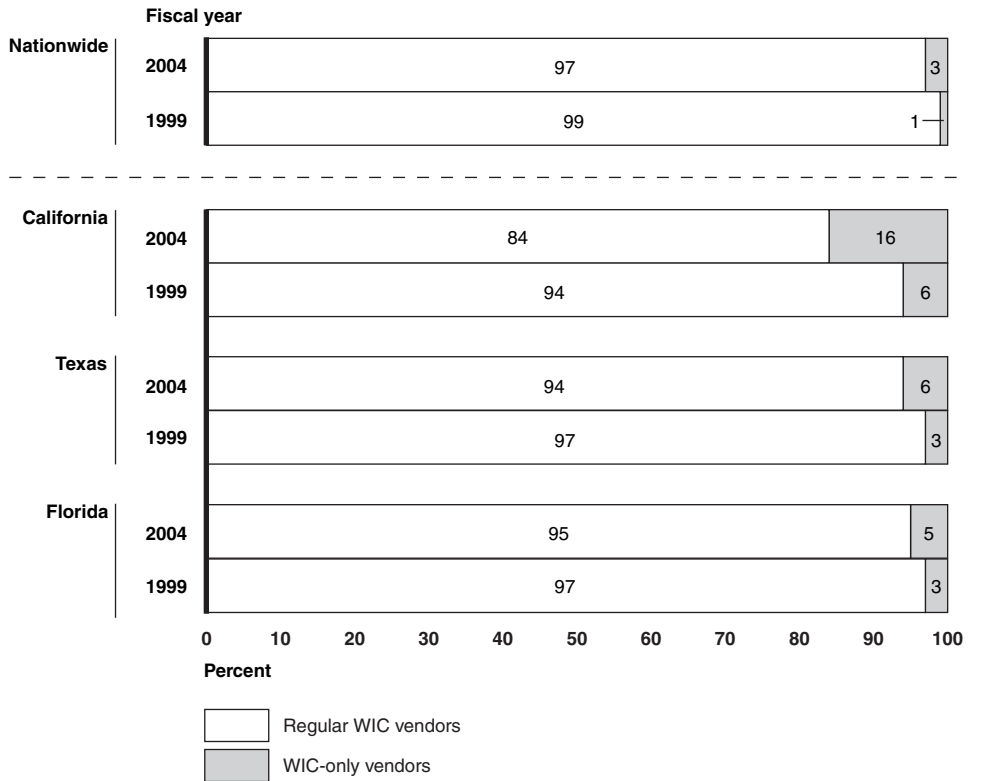
Note: Vendor counts include any vendor in operation at some point during the fiscal year. All figures have been rounded to the nearest whole number except for states that accounted for less than 0.5 percent of all WIC-only vendors, which are marked as "<1 percent." Metropolitan areas were determined using U. S. Census Bureau definitions for metropolitan statistical areas.

The total number of WIC-only vendors in operation at any point in 2005 is not yet available, but may be lower than the 1,180 reported for 2004. For example, WIC state agency officials in Texas and Florida have indicated that the number of WIC-only vendors in their respective states decreased after 2004. Both WIC state agencies continued to monitor and occasionally disqualify WIC-only vendors. At the same time, Texas WIC agency officials have indicated that a number of WIC-only vendors went out of business. Moreover, because the Consolidated Appropriations Act of 2005 prohibited states from authorizing additional WIC-only vendors after December 8, 2004, WIC state agencies could not replace WIC-only vendors that departed the program with new WIC-only vendors during much of fiscal year 2005.

**Despite Recent Growth,
WIC-Only Vendors
Represent a Fraction of All
WIC Vendors**

Notwithstanding the increase in the number of WIC-only vendors in recent years, WIC-only vendors have remained a fraction of total WIC vendors. Nationally, the share of all WIC vendors accounted for by WIC-only vendors increased from approximately 1 percent in 1999 to about 3 percent in 2004 (see fig. 4). During the same period, the number of regular WIC vendors in operation at any point changed only slightly, from 43,712 in 1999 to 43,463 in 2004. However, in California, Texas, and Florida, WIC-only vendors have accounted for a larger proportion of all WIC vendors than in the nation as a whole. At the same time, these three states were home to nearly one-third of all WIC participants nationwide.

Figure 4: Percentage of Total WIC Vendors Represented by Each Vendor Type, Nationwide and in Select States



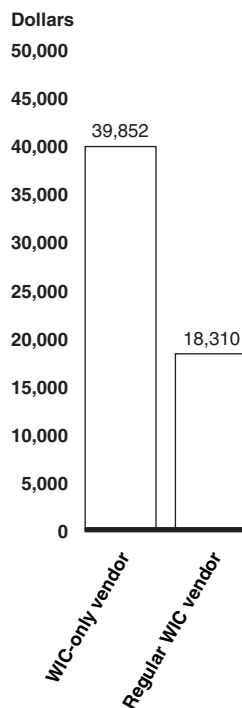
Source: GAO analysis of FNS TIP files, 1999 and 2004.

Note: Vendor counts include any vendor in operation at some point during the fiscal year.

WIC-Only Vendors Had the Smaller Share of the WIC Market in 2004 but Redeemed about Twice the Average Monthly Amount per Vendor as Regular WIC Vendors

Nationally, as their numbers might suggest, WIC-only vendors had the smaller share of the WIC market during an average month in 2004, but on a store-by-store basis, they redeemed about twice as much as regular WIC vendors.²² Whereas regular WIC vendors accounted for 94 percent of business in the WIC market, or about \$784 million on an average monthly basis in 2004, WIC-only vendors redeemed about \$47 million, or 6 percent of all WIC redemptions.²³ However, WIC-only vendors nationwide redeemed nearly \$40,000 per vendor during an average month that year, about twice the average monthly amount from WIC as regular WIC vendors that participated in the program (see fig. 5).

Figure 5: Average Monthly WIC Redemptions per Vendor in 2004, by Vendor Type



Source: GAO analysis of FNS regional office 2004 TIP files.

²² Because we were unable to calculate the growth of WIC-only vendors' redemptions over time, we reported redemptions on an average monthly basis in 2004.

²³ WIC business volume is defined as total redemptions from WIC, for the purposes of our report.

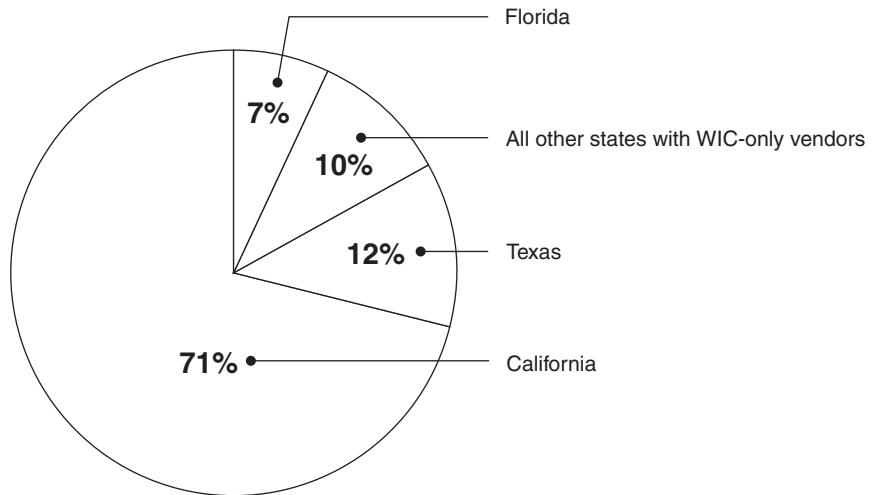
Because these data represent simply the average monthly payments received per vendor from WIC state agencies, differences between WIC-only vendors' redemptions and those of regular WIC vendors could signify that a vendor type charges higher prices for WIC food, but could also reflect the number of participants that shop at each vendor type; the probability that a participant selected all or only part of the food items on a voucher; the amount of WIC business volume conducted, on average, by WIC-only and regular WIC vendors; or all of these practices.²⁴ For example, a WIC-only vendor that serves a far greater number of WIC participants than a regular WIC vendor would tend to have higher redemptions for the same WIC items even if both vendors' prices for those items were comparable.

At the state level, the three states with the most WIC-only vendors also produced the majority of total WIC-only vendor business volume during an average month in 2004. Though the average monthly redemptions per WIC-only vendor in California, Texas, and Florida fell below the high of nearly \$64,000 per vendor in Oklahoma, the three states accounted for 90 percent of all WIC-only redemptions during that period (see fig. 6).²⁵

²⁴ The FNS data we analyzed did not allow us to make determinations about these differences.

²⁵ See appendix III for the average monthly redemptions per WIC-only vendor in fiscal year 2004 for all states with WIC-only vendors.

Figure 6: Share of Total Average Monthly WIC-Only Redemptions by State in 2004



Source: GAO analysis of FNS regional office 2004 TIP files.

WIC-Only Vendors and Regular WIC Vendors' Business and Marketing Practices Differ in Their Approach to Customer Service and Price

WIC-only and regular WIC vendors generally employed different business and marketing practices, largely in response to the two different customer groups they served and the nature of the markets they faced. Because WIC participants are not required by the WIC program to consider retail prices, vendors that served only WIC participants competed for their business by emphasizing customer service, which participants seemed to value. On the other hand, regular WIC vendors served non-WIC consumers as well as WIC participants. Because these non-WIC consumers are considered price sensitive, regular WIC vendors competed for their business based on price and competitors' behavior. These differences in customer base also affected decisions on where to locate stores and how to advertise. WIC-only stores tended to locate near WIC clinics, while regular WIC vendors considered their broader customer base when choosing locations. Also, WIC-only vendors used community-based media and word-of-mouth to advertise, while regular WIC vendors were more likely to use mass media. Finally, WIC-only and regular WIC vendors used similar food purchasing practices, because the cost of food purchased for resale by vendors is related more to the quantity of food purchased than the type of vendor purchasing the food. Both WIC-only and regular WIC vendors were able to lower the average cost of food purchased for resale when they bought in volume, according to WIC state agency officials.

**WIC-Only Vendors
Emphasized Customer
Service, while Regular WIC
Vendors Focused on Price**

WIC-only vendors employed a business model that allowed them to emphasize customer service for program participants rather than price, while regular WIC vendors focused on attracting a broader customer base by offering competitive prices. These differences have likely evolved because WIC shoppers need not be price sensitive. WIC-only vendors attracted WIC participants, who were not price sensitive, by emphasizing customer service. Because WIC participants were not price sensitive, they responded to non-price inducements, like service, which they valued. As a result, they might take advantage of the service offered by WIC-only vendors, even if their prices were somewhat higher. In comparison, regular WIC vendors more often used price reductions to appeal to a broad customer base, most of whom were price-sensitive shoppers, according to WIC state agency officials.

Although WIC-only vendors did not compete on the basis of price, WIC-only vendors did compete with other WIC-only and regular WIC vendors on the basis of customer service, a central feature of their business model, according to WIC state officials. WIC-only vendors typically organized their stores in ways that emphasized service to their WIC participant customers. Because WIC-only vendors stocked only WIC-approved items (see fig. 7), they eliminated the need for WIC participants to identify WIC-eligible foods. Moreover, WIC-only vendors often kept food behind a counter, and employees gathered and bagged the WIC items customers requested, according to most WIC state agency officials we interviewed and our observations during site visits. (see fig. 8) As a result, customers did not need to spend time finding products in store aisles or face the risk or stigma of selecting an unauthorized food item and creating a delay in the checkout line. Several state officials thought that this feature of WIC-only vendors' business model was a prime attraction for WIC participants.

Figure 7: Available WIC Food Items at WIC-Only Vendor in Texas



Source: GAO.

Figure 8: Interior of WIC-Only Vendor in California



Source: GAO.

Some state officials told us they believe the customer service features of WIC-only vendors' business model, together with their use of only one or two checkout points, their limited customer floor area, and their location in low-income neighborhoods, would reduce their operating expenses. However, we were unable to obtain the data needed to confirm these views.

Few WIC-only vendors used price-based incentives such as buy-one-get-one-free specials, sale items, or discount cards to attract WIC customers. Because WIC participants purchase items with vouchers and are not price sensitive, price discounts would not induce them to go to a store with lower prices. However, for this same reason, WIC-only vendors would not risk losing WIC customers, even if their prices were higher.

In the past, WIC-only vendors also have given away food and non-food items, called incentives, to attract customers. For example, WIC-only vendors gave away strollers and diapers in California and North Carolina, cash in Arkansas, and gift certificates in Georgia, according to WIC state agency officials. Because WIC-only vendors' main source of revenue was the WIC benefit, paid for by the WIC program, offering such incentives raised concerns about the use of federal funds. However, several WIC state agency officials noted that the use of incentives by WIC-only vendors has decreased as a result of rule changes required by the Child Nutrition and WIC Reauthorization Act of 2004.²⁶ In fact, the WIC state officials we spoke with in California, North Carolina, and Arkansas said that WIC-only vendors no longer give away most of the items they provided in the past. None of the WIC-only vendors we observed on our site visits provided such incentives, with the exception of one in California that gave customers a small amount of free produce for purchasing a certain quantity of food items.

In contrast to WIC-only vendors, the retail grocers that we define as regular WIC vendors targeted the population at large and did not focus on customer service, according to WIC state agency officials.²⁷ Regular WIC

²⁶Section 203(e)(14) of the law states, "A State agency shall not authorize or make payments to a [WIC-only] vendor that provides incentive items or other free merchandise, except food or merchandise of nominal value (as determined by the Secretary), to program participants unless the vendor provides to the State agency proof that the vendor obtained the incentive items or merchandise at no cost."

²⁷ Under the Child Nutrition and WIC Reauthorization Act of 2004, an unknown number of these vendors we call regular WIC vendors will be reclassified as 50 percent WIC vendors. As such, they will continue to serve some combination of both WIC participants and price-sensitive non-WIC shoppers.

vendors served WIC participants, but their largest group of customers was non-WIC consumers, who are price sensitive. For the most part, regular WIC vendors targeted their business practices on their non-WIC customers and set prices in response to this group. The regular WIC vendors we observed on our site visits provided examples of their business practices that contrast with those of WIC-only vendors. Of the 12 regular WIC vendors we visited, none gathered the WIC food items listed on the voucher for WIC customers and only 3 had food items authorized by the WIC program placed together on an aisle shelf to assist participants in finding the items on their vouchers. Having to search store aisles and shelves for the correct food type, brand, and size listed on their voucher can make shopping for WIC food items at regular WIC vendors challenging or uncomfortable for WIC participants.

WIC state officials told us that regular WIC vendors' marketing practices are price-based, that is, they competed in the market based on price and their competitors' behavior. Regular WIC vendors commonly use buy-one-get-one-free specials, sale items, discount cards, and other price-based incentives to attract a broad client base that is price sensitive. Since the rule changes required by the Child Nutrition and WIC Reauthorization Act of 2004, regular WIC vendors, who have sources of revenue other than federal funds from their broad customer base, continue to provide higher-priced incentives to attract customers, according to several of the WIC state agency officials and WIC vendor employees whom we interviewed.

Despite these differences, WIC-only vendors and regular WIC vendors used some similar business or marketing practices that did not involve price-based incentives. For example, both employed checkout staff who spoke one or more languages other than English, according to the majority of WIC state agency officials interviewed, a practice we observed on our site visits. In addition, both vendor types in several states organized community outreach activities, ranging from baby clothes exchanges to barbecues.

WIC-Only Vendors Tend to Locate near WIC Clinics; Regular WIC Vendors Base Location Decisions on Their Broader Customer Base

WIC-only vendors are often located in places readily accessible to WIC participants. All WIC state agency officials we interviewed stated that WIC-only vendors tend to locate their stores as close to WIC clinics as possible (see fig. 9), and several officials indicated that WIC-only vendors may also operate in low-income neighborhoods—geographic areas that are often one and the same.

Figure 9: Proximity of WIC-Only Vendor to WIC Clinic in Texas



Source: GAO.

In contrast, WIC state agency officials told us that regular WIC vendors typically make their location decisions based on their entire customer population, not just WIC participants. While WIC state agencies consider participant access when authorizing regular WIC vendors, they need not ensure that the vendor will be located near a WIC clinic.

WIC-Only Vendors Used Community-Based Media to Advertise; Regular WIC Vendors Use Mass Media

WIC-only vendors generally advertise with publicity flyers, word-of-mouth, and community-based media. WIC officials in all seven states reported that WIC-only vendors tend to use publicity flyers to publicize their stores; figure 10 presents an example of this type of advertisement. Further, word-of-mouth is the most important advertising practice for some WIC-only vendors. In addition to using flyers and word-of-mouth, some WIC-only vendors in Alabama, Florida, and North Carolina advertise in local

newspapers, and a few WIC-only vendors in California and North Carolina promote their stores via radio.

Figure 10: Sample WIC-Only Vendor Promotional Flyer

WIC CARDS ACCEPTED

9908 South Gessner
 (South Gessner at South Braeswood)
Houston, Texas 77071

Business Hours
Mon-Sat. 9:00 a.m.-8p.m.
Tel: 713-779-2870

**ALL WIC FOOD PRODUCTS SUPPLIED
 WITHOUT THE LONG SUPERMARKET LINES.**



- ◆ Enfamil Lipil
- ◆ Enfacare
- ◆ Lactofree
- ◆ Special Infant Milk
- ◆ Peanut Butter
- ◆ Juice
- ◆ Carrots
- ◆ Enfamil with Iron
- ◆ Prosobee
- ◆ Cereal
- ◆ Cheese
- ◆ Fresh Milk
- ◆ and much more....

We Guarantee No waiting,
No Delay, Out in Minutes!

MRS. BIRD BAKERY WIC STORE	FIESTA WIC OFFICE	Highway 59
S. GESSNER WALGREEN	S. BRAESWOOD	BISSONNET
W. BELLFORT		



Source: Profile Unlimited.

In addition, most of the WIC-only vendors we visited post signs indicating that they accept vouchers. In California, the majority of the WIC-only vendors we visited post signs indicating that the stores accept vouchers. In Texas and Florida, several stores have replaced the name of the store in the marquee over the front door with statements such as “WIC Checks Accepted Here” (see fig. 11).²⁸

Figure 11: Marquee of WIC-Only Vendor in Florida



Source: GAO.

In contrast to WIC-only vendors, which used community-based media, regular WIC vendors typically advertised to a broad client base through mass media such as newspapers, television, radio, and billboards, according to most WIC agency officials and regular WIC vendor employees

²⁸Several WIC state agency officials noted that their states limit or do not permit WIC vendors to use the WIC acronym for advertising purposes. FNS policy states, “WIC State agencies have the discretion to authorize WIC vendors to use the acronym ‘WIC’ and/or the WIC logo for the following purposes: 1) to identify the retailer as an authorized WIC food vendor; and 2) to identify authorized WIC foods by attaching channel strips or shelf-talkers stating ‘WIC-approved’ or ‘WIC-eligible’ to grocery store shelves.”

interviewed. However, most of the regular WIC vendors that we visited do not post signs indicating that they participate in the WIC program, even though most WIC state agency officials whom we interviewed said that they provide regular WIC vendors with a state-authorized sign indicating that the store accepts vouchers.

Officials Told Us That WIC-Only and Regular WIC Vendors Lower Food-Purchasing Costs by Buying in Volume, although the Effect on Retail Food Prices Is Unclear

Although their marketing and advertising practices differ, WIC state officials told us that WIC-only and regular WIC vendors use similar food-purchasing practices. Wholesalers tend to offer WIC-only and regular WIC vendors lower prices for higher volume purchases, according to a majority of WIC state agency officials interviewed. Some vendors have lowered food-purchasing costs by expanding the number of outlets they operate or forming consortia to buy in greater volume. For example, one WIC-only vendor in California operates a chain of 49 outlets. A few WIC-only chains in California and Florida have become wholesalers themselves because they are large enough to purchase food directly from manufacturers. WIC state agency officials in two states indicated that WIC vendors increase the amount of food purchased by forming a consortium with other vendors. For example, several WIC-only vendors in Florida purchase food collectively to earn volume discounts from wholesalers.

In contrast to WIC vendors that form consortia or are large enough to purchase independently from wholesalers or manufacturers, some small WIC vendors—including both WIC-only and regular WIC vendors—purchase food for resale from other retail sources. The small WIC vendors may not have the room to store large amounts of goods or may not be able to buy on credit from wholesalers. Although several WIC state agency officials said that buying from other retailers leads to higher costs, a few officials noted that WIC vendors with a small purchasing capacity may in fact pay less by buying food from other large retailers, such as Wal-Mart or Costco, instead of from wholesalers.

Even though WIC vendors can reduce their average food-purchasing costs by buying food in greater volume, existing data did not permit us to determine the relationship between food-purchasing costs and retail food prices. The retail price for food items reflects numerous store-operating expenses in addition to the cost of buying food for resale—such as employee salaries, rent, and insurance—and a decrease in average food-purchasing costs over time does not necessarily result in a reduction in other business costs.

We Estimated That Program Participation Would Have Decreased by about 136,000 WIC Participants or Expenditures Would Have Increased by About \$50 Million if WIC-Only Vendors' Market Share Had Doubled in 2004

If the market share of WIC-only vendors had doubled in California, Texas, and Florida, either program participation would have decreased by about 3 percent—about 136,000 participants—or program expenditures would have increased by about 3 percent—about \$50 million—in those states, according to our scenario estimates using conditions present in 2004.²⁹ These changes would have occurred because the average value of all food vouchers redeemed by WIC-only vendors in 2004 was higher than the average value of all food vouchers redeemed at regular WIC vendors. However, even though the change would be a similar 3 percent of 2004 levels across all three states, the reasons for the size of the change differ among the states, depending on WIC-only vendors' market share and the difference in WIC-only and regular WIC vendors' average voucher value. Because the average value of all food vouchers we calculated did not specify either the price or quantity of individual items that make up the voucher, we could not determine whether the prices for individual items at WIC-only vendors were higher than at regular WIC vendors. At a minimum, data on both the price a vendor charges for individual food items and the quantity purchased by participants are needed to make price comparisons.

If WIC-Only Vendors' Market Share Had Doubled in 2004 and Program Expenditures Were Held Constant, We Estimated That Program Participation Would Have Decreased by About 136,000 WIC Participants

The number of participants that could have been served would have decreased if the WIC-only vendors' market share increased while holding total WIC food expenditures constant at 2004 levels, according to our first scenario.³⁰

As shown in table 2, if redemptions at WIC-only vendors had doubled in each state, the decrease in the number of participants that could be served would be 136,202, or about 3 percent of 2004 levels for the three states.

²⁹Our estimates are based on available data for WIC-only and regular WIC vendors, excluding pharmacies and commissaries, from 2004 and assume that all program characteristics other than those we manipulated did not change. See appendix I for additional information on our methodology.

³⁰We increased the market share of WIC-only vendors by increasing the number of food vouchers redeemed at these stores. (See scenario 1 analysis in app. I.)

Table 2: Estimated Change in the Number of Participants Served if WIC-Only Vendors' Market Share Increased while Program Expenditures Were Held Constant at Fiscal Year 2004 Levels

Percentage increase in WIC-only vendors' market share	California		Texas		Florida		Total for 3 states	
	Decline in number of participants served ^a	Decline as a percentage of 2004 level ^b	Decline in number of participants served	Decline as a percentage of 2004 level ^b	Decline in number of participants served	Decline as a percentage of 2004 level ^b	Decline in number of participants served	Decline as a percentage of 2004 level ^b
10 percent increase	-6,277	0.29	-5,271	0.36	-2,072	0.31	-13,620	0.32
20 percent increase	-12,553	0.59	-10,542	0.72	-4,145	0.61	-27,240	0.64
30 percent increase	-18,830	0.88	-15,814	1.08	-6,217	0.92	-40,861	0.96
50 percent increase	-31,383	1.47	-26,356	1.79	-10,362	1.53	-68,101	1.59
100 percent increase	-62,766	2.95	-52,712	3.58	-20,724	3.05	-136,202	3.18

Source: GAO analysis of California, Texas, and Florida WIC state agency redemption data for 2004.

^aWe calculated the number of participants that would be affected by using the average number of redemptions per participant in each state. (See app. I)

^bTo develop our estimates for fiscal year 2004, we used our redemption data to calculate the number of people who redeemed a voucher that year: 2.1 million people redeemed vouchers in California, 1.5 million in Texas, and 0.679 million in Florida. To avoid double counting, we used a unique identification number for each person that was available in our data and counted each person only once. Because we had data for every voucher redeemed in each of the three states, for every month in fiscal year 2004, our calculations of annual program participation likely exceeded FNS's estimates based on average monthly participation. (See app. I)

Because the average value of all food vouchers redeemed by WIC-only vendors in all three states in 2004 was higher than the average value of all food vouchers redeemed by regular WIC vendors, more funds would have been needed to reimburse WIC-only vendors than regular WIC vendors for the same number of vouchers.³¹ As a result, when the number of food vouchers redeemed by WIC-only vendors increased and program expenditures were held constant in our scenario estimate, fewer food vouchers could be issued and fewer participants could be served. This

³¹These data should be treated with caution. A higher average value for all food vouchers does not necessarily mean that prices for individual food items at WIC-only stores are higher than prices at regular WIC stores. Our average value of all food vouchers redeemed is the average value of all food vouchers redeemed in particular states, by type of vendor. (See app. I.)

constraint was reflected in our analysis by a reduction in the number of vouchers redeemed by regular WIC vendors.

The Reasons for the Size of the Decrease in Program Participation Differ among the Three States

Even though the size of the decrease in program participation would be a similar 3 percent of 2004 levels across all three states, the reasons for the size of the decrease differ among the states. Two key factors would affect the size of the decrease in each state: (1) the size of WIC-only vendors' share of the total WIC vendor market and (2) the difference between the average value of food vouchers redeemed by WIC-only and by regular WIC vendors.³² As shown in table 3, in California, WIC-only vendors' market share was 41.46 percent in 2004, and the difference in the average value of food vouchers redeemed by WIC-only and regular WIC vendors was \$0.87. Because WIC-only vendors' market share is 41 percent in California, doubling their market share means that WIC-only vendors would account for most of the WIC market in that state.

Table 3: Difference between the Average Value of WIC-Only and Regular WIC Vendor Food Vouchers in 2004 and the Market Share of WIC-Only Vendors in California, Texas, and Florida

State	Average value of WIC-only food voucher redeemed Dollars	Average value of regular WIC food voucher redeemed Dollars	Difference between WIC-only and regular WIC redemptions Dollars	WIC-only vendors' market share Percent
California	\$13.15	\$12.28	\$0.87	41.47
Texas	\$31.55	\$21.72	\$9.83	7.93
Florida	\$22.92	\$18.50	\$4.42	12.8

Source: GAO analysis of California, Texas, and Florida WIC state agency redemption data for 2004.

Conversely, in Texas and Florida, redemptions at WIC-only vendors accounted for a smaller market share than in California in 2004—8 percent in Texas and 13 percent in Florida. The difference between the average value of food vouchers redeemed at WIC-only and regular WIC vendors in 2004, however, was higher than in California—\$9.83 in Texas and \$4.42 in Florida. Therefore, although WIC-only vendors accounted for a larger

³²Our scenario analyses assumed that all factors other than those we changed, including the difference between WIC-only and regular WIC vendors' average food voucher values, remained constant as we increased WIC-only vendors' market share.

portion of the WIC vendor market in California than in Texas and Florida, the smaller difference in WIC-only and regular WIC vendors' food voucher values would have helped counteract the overall effect of an increase in California WIC-only vendors' market share. Conversely, the smaller market share held by WIC-only stores in Texas and Florida would have partially offset the overall effect of the larger difference in average food voucher value in those two states.

We acknowledge that we could have increased the market share held by WIC-only vendors in Texas and Florida in 2004 further in our scenario analysis. However, our analysis is based on the relative market shares and the corresponding differences in average food voucher values in 2004. Over time, the differences in average food voucher values as well as the market share held by WIC-only vendors could increase or decrease with corresponding implications for program resources.

If WIC-Only Vendors' Market Share Had Doubled and Program Expenditures Were Not Held Constant, Program Expenditures Would Have Increased About \$50 Million

Program expenditures would increase if the market share of WIC-only vendors grew and all else remained the same, including the overall number of food vouchers redeemed by both WIC-only and regular WIC vendors in 2004.³³ As shown in table 4, if redemptions at WIC-only stores doubled in each state, program expenditures would increase by about \$50 million, or 3 percent above the three states' 2004 levels. As discussed previously, the size of WIC-only vendors' share of t See appendix IV for the range of vouchers in California, Texas, and Florida that we analyzed. The total WIC vendor market and the difference between the average value of food vouchers redeemed by WIC-only and by regular WIC vendors in part explain why the changes for the three states are similar.

³³The overall number of food vouchers redeemed would remain constant as WIC-only vendors' market share increases because the number of vouchers redeemed by regular WIC stores would go down. Because our estimates do not take into account savings from infant formula rebates, the estimated dollar amounts in our scenario analysis do not reflect total cost to the program.

Table 4: Change in Program Expenditures if WIC-Only Vendors' Market Share Increases while Maintaining the Total Number of Food Vouchers at Fiscal Year 2004 Levels

Percentage increase in WIC-only vendors' market share	California		Texas		Florida		Total for 3 states	
	Change in WIC dollars	Change as a percentage of 2004 levels ^a	Change in WIC dollars	Change as a percentage of 2004 levels ^a	Change in WIC dollars	Change as a percentage of 2004 levels ^a	Change in WIC dollars	Change as a percentage of 2004 levels ^a
	Millions of dollars	Percent	Millions of dollars	Percent	Millions of dollars	Percent	Millions of dollars	Percent
10 percent increase	2.52	0.29	1.78	0.35	0.69	0.30	4.99	0.31
20 percent increase	5.04	0.57	3.55	0.69	1.38	0.59	9.97	0.61
50 percent increase	12.60	1.43	8.89	1.73	3.45	1.48	24.93	1.53
100 percent increase	25.20	2.86	17.77	3.46	6.89	2.96	49.86	3.07

Source: GAO analysis of California, Texas, and Florida WIC state agency redemption data for 2004.

^aIn 2004, the value of redemptions was \$880 million in California, \$513 million in Texas, and \$233 million in Florida.

Data Limitations Prevented Us from More Fully Analyzing the Effects of WIC-Only Vendors on WIC Program Participation and Expenditures

Although our two scenario estimates are based on the best available data concerning WIC-only vendors' contributions to expenditures and participation, they are illustrative only and have limitations. Because food item price data and quantities of food items purchased were not available, we were unable to construct analyses that would have isolated the effect of actual prices charged by WIC-only and regular vendors on program expenditures or participation. For example, some food vouchers in our data were composed of a single item, but most of them contained multiple food items, such as milk, cheese, and cereal.³⁴ Because most of the vouchers contained several types of WIC food and allowable quantities for each food item, the value of an individual voucher was not the price a vendor charged for an individual food item. The value of an individual food voucher was the sum of the price of each food item on the voucher times the quantity purchased. As a result, the difference in value between WIC-only and regular WIC vouchers could be due to differences in prices for

³⁴See appendix IV for the range of vouchers in California, Texas, and Florida that we analyzed.

individual items or differences in the quantities redeemed or both. For example, if some participant customers of regular WIC vendors select only a portion of the food items on a voucher, regular WIC vendors' average redemption value would be lower than WIC-only vendors', if their WIC customers received all of the items on the voucher. As a result, without these data, we could not attribute with certainty the changes in WIC program participation and expenditures we identified to WIC-only vendors' prices.

Conclusions

The growth in the number of WIC-only vendors in recent years, combined with our finding that individual WIC-only vendors generally had more than twice the business volume of regular WIC vendors in an average month in 2004, suggest that WIC-only vendors' share of the WIC retail market was increasing before the 2004 legislation. Although in some states the number of WIC-only vendors has not grown, in others the number has grown quickly and the future effect of the new cost containment requirements on this growth is not known. Our scenario analyses suggest that continued WIC-only vendor growth could have resulted in either fewer participants being served or higher program costs. Moreover, given the current program model that focuses on ensuring participants receive prescribed foods without having to consider the costs of the commodities, participants would likely continue to take advantage of the customer service and convenient location offered by WIC-only vendors, even if prices are higher.

The lack of price and quantity data needed to explain the higher monthly average redemptions of WIC-only vendors and the higher average value of vouchers redeemed by WIC-only vendors leaves important questions unanswered. We could not determine how WIC-only and regular WIC vendors' prices differ. Our study was a first attempt to develop a national picture of WIC-only vendors, to inform policy initiatives and practice. However, absent a systematic analysis of vendor-level data, it is difficult to determine with more certainty how changes in market share between WIC-only and regular WIC vendors would affect WIC program expenditures.

The lack of price and quantity data on WIC food purchases also has broader program implications. Although WIC state agencies have used routine and high-risk vendor monitoring and voucher review to promote accountability, for the most part they authorize and reimburse their WIC-only and regular WIC vendors without knowing precisely which prescribed foods were purchased and in what quantities, what price the program was being charged for food, and whether participants were receiving the whole

food package or only part of it. Collecting these data under the current system would be costly and burdensome to states. Under the new interim rule, WIC state agencies are required to collect vendors' shelf price data but not the actual price charged the program or the quantity purchased. However, two recent developments in the WIC program—the implementation of electronic benefits transfer and the redesign of the WIC food package to include fruit and vegetables—may lead to changes in the WIC voucher and present WIC state agencies the opportunity to collect price and quantity data during the WIC transaction in a cost-effective way. This information could be used to determine whether the prices that both WIC-only and regular WIC vendors charge the program are reasonable and to analyze the effects of WIC vendors' prices on program expenditures with greater certainty.

Recommendation for Executive Action

To assist WIC state agencies in more effectively monitoring WIC vendors' redemption practices, in implementing the new cost containment requirements, and in analyzing program expenditures, we recommend that the Secretary of Agriculture require, if collection of more detailed information on WIC food purchases is cost-effective through EBT implementation, that WIC state agencies collect data on both the price and the quantity of each WIC food item purchased, especially in each state that authorizes WIC-only vendors.

Agency Comments

We provided a draft of this report to the U.S. Department of Agriculture for review and comment. On June 14 and 16, 2005, FNS officials provided us with their oral comments. The officials generally agreed that our methodology was reasonable, given data constraints, and did not dispute our findings on the recent growth of WIC-only vendors, the business model differences between WIC-only and regular WIC vendors, and the likely effect on the WIC program of further growth of WIC-only vendors' market share based on 2004 data. However, they raised several concerns. They asked us to make clear that the 2004 data we used to determine the growth in the number of WIC-only vendors preceded the current moratorium on approving new WIC-only vendors, and the data we used to calculate the effect of additional growth on the program were gathered before the full implementation of new cost containment provisions. These provisions, enacted when the program was reauthorized in 2004, are intended to help ensure that the program pays competitive prices to all authorized vendors. We incorporated additional references to these recent changes where appropriate.

FNS officials also commented on our finding that although the average value of all vouchers redeemed by WIC-only vendors in our three states in 2004 was higher than that of vouchers redeemed by regular WIC vendors in these states, we could not determine with certainty whether prices charged by WIC-only vendors are higher than those charged by regular WIC vendors because we could not disaggregate price from quantity at the level of purchase. Officials acknowledged the ongoing challenges in collecting these data for foods provided under the WIC program. However, they expressed concern that this finding would be misinterpreted to mean there is no price difference between WIC-only and regular WIC vendors, and our finding on the likely effect on the program of continued growth of WIC-only vendors under 2004 conditions would be overlooked. We made some minor technical revisions to our report wording to clarify our findings and the limitations of available data on prices charged by WIC vendors.

Further, in the draft these officials read, we recommended that FNS consider conducting a small-scale study to better understand how WIC-only vendor prices and operations contribute to program expenditures. Officials did not believe this study would be necessary or cost-effective because of the difficulty in collecting price and quantity data on WIC purchases under the current paper-based system, and because program regulations already require monitoring of shelf prices and redemption data as a component of their vendor management. We understand that USDA has limited funds available for research, with multiple demands on these funds. Since the cornerstones of the new legislative requirements are that prices at above-50-percent vendors should be competitive with those charged by regular vendors and that vendors that derive more than 50 percent of their revenue from WIC food instruments do not result in higher food costs to the program than do other vendors, officials are hopeful that the new cost containment provisions will ensure the program pays competitive prices to all vendors. However, the cost containment provisions are complex and entail significant changes for some states. We believe it is important for FNS to closely monitor implementation of cost containment provisions to help ensure that program costs are in fact contained as intended. Moreover, as long as the program is structured so that participants need not pay attention to price, and given the current lack of available information on whether participants are actually receiving their prescribed foods and at what price, we believe FNS should proactively take advantage of all cost-effective ways of gathering data that will help contain costs and ensure the program is meeting its overall goals. In response, we have removed our recommendation for further study and further clarified our recommendation for additional data collection on the price and quantity of WIC food items purchased under a new EBT system.

FNS also made additional technical comments, which we have incorporated where appropriate.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies to the Secretary of Agriculture, relevant congressional committees, and other interested parties. We also will make copies available to others upon request. In addition, the report will be made available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-7215 or fagnonic@gao.gov. Contact points for our Office of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff that made major contributions to this report are listed in appendix V.



Cynthia M. Fagnoni
Managing Director, Education, Workforce, and
Income Security Issues

Appendix I: Scope and Methodology

This appendix discusses in detail our methodology for determining whether the vendors authorized by the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) that are known as WIC-only vendors contribute more to WIC program expenditures than do regular WIC vendors. The study was framed around three questions: (1) what is known about WIC-only vendors' growth and their share of the WIC market in recent years? (2) To what extent do the business and marketing practices of WIC-only and regular WIC vendors differ?(3) What would WIC-only vendors' contribution to WIC program expenditures have been if their market share increased?

Scope

Because existing research on WIC-only vendors consisted of a few single-state studies or analyses of a small number of individual states, we sought to develop a national picture. To ensure comparability of costs and business practices, we focused on the WIC retail vendor market, excluding Mississippi, which operates a direct distribution system, and Vermont, which uses a home food delivery system. To prevent potential duplication of data, we limited the study to the geographically contiguous states, omitting the 32 Indian Tribal Organizations that authorize many of same vendors authorized by the geographic WIC state agencies in which they reside. Given the large size of the WIC retail vendor population, we used existing data sources for our national-level analyses of WIC-only vendors' growth and market share. Because WIC food instrument and redemption systems are unique to each state, we focused our analyses of WIC-only vendors' contribution to program expenditures at the state level, concentrating on California, Texas, and Florida, the states that authorize 84 percent of WIC-only vendors. To examine WIC-only and regular WIC vendors' business and marketing practices, we relied on the experience of WIC state agency officials who have managed a substantial number of WIC-only vendors, including officials from seven states that had authorized 10 or more WIC-only vendors in fiscal year 2004.

Methodology

We used separate sources of data for each study question, including national-level administrative data for the entire WIC vendor population, state-level administrative data for every WIC food instrument redeemed in fiscal year 2004, telephone interviews with WIC state agency directors and vendor management staff, and on-site observations and interviews at WIC-only and regular WIC vendor establishments. Before deciding to use the administrative data, we conducted a thorough data reliability assessment of each data base, including a review of the data collection and reporting system that produced the data, guidance on variable definitions and

measures provided to entities that reported the data, and steps the Food and Nutrition Service (FNS) or the WIC state agencies took to ensure data reliability. Once we received the administrative data files, GAO's methodologists conducted electronic tests to check for the accuracy and completeness of individual data elements. We discuss our testing procedures and steps we took to mitigate any data limitations below, as part of the methodology for each study question. On the basis of these efforts, we believe the data are sufficiently reliable for our purposes. We conducted a descriptive analysis of WIC-only vendors' growth and market share, a scenario analysis of WIC-only vendors' potential contribution to WIC program expenditures, and a comparative analysis of WIC-only and regular WIC vendors' business and marketing practices.

Procedures for Analyzing WIC-Only Vendors' Growth and Market Share

To determine what is known about WIC-only vendors in recent years, we gathered various federal and other data sources. We collected copies of FNS's The Integrity Profile (TIP) for federal fiscal years 1999 through 2004. TIP is a database that includes information on all vendors authorized to provide food benefits under the WIC program at any point during a fiscal year. For each vendor entry, TIP identifies vendor type, location, and WIC redemption amounts, among other data. TIP data is provided by 90 WIC state agencies, representing all 50 states, the District of Columbia, Indian Tribal Organizations (ITOs), and U.S. territories. WIC state agencies submit electronic data to FNS on an annual basis in accordance with instructions provided by FNS.¹ To complement information provided by TIP, we conducted a literature search to compile a list of all research conducted on WIC-only vendors in recent years, but found that few such studies exist. As a result, our analysis focused largely on TIP.

Data Collection

As one step in our data reliability assessment process, we evaluated the integrity of TIP data. This procedure revealed two primary limitations. First, TIP does not report the actual date when a vendor enters or exits the WIC program; rather, it only indicates whether a vendor was authorized by a WIC state agency at any point during a fiscal year. As a result, TIP likely overstates the number of vendors in operation on any given date. For example, the number of WIC vendors in operation on the first day of a particular fiscal year—October 1—is probably less than the number

¹Through fiscal year 2004, WIC state agencies provided data in electronic files, using either ASCII or delimited file formats, which FNS then converted into a consolidated file. For fiscal year 2005, WIC state agencies were able to upload data directly into the FNS database.

reported by TIP for the same fiscal year, as TIP includes all WIC vendors for that fiscal year that were authorized as of October 1, in addition to all vendors that entered the program after that date. Thus, we could not calculate a percentage-based growth rate from year to year using TIP. Instead, we could only calculate the total number of WIC vendors of a specific type in operation for at least 1 day during a particular fiscal year.

The second limitation we identified was that national TIP redemption data did not meet GAO's data reliability standards, based upon information provided by FNS. Although FNS had requested that WIC state agencies submit average monthly redemption data for all WIC vendors during fiscal years 1999-2003, FNS officials determined subsequently that not all WIC state agencies had followed these instructions. FNS officials concluded that some WIC state agencies had submitted redemption data in formats other than average monthly amounts, such as annual or quarterly figures, but they were uncertain about the time period used by any particular WIC state agency in reporting redemption data. In recognition of this problem, for fiscal year 2004, FNS requested that WIC state agencies specify the time period that their redemption figures covered when submitting TIP data. FNS then annualized all redemption figures not submitted as annual amounts by multiplying the figures that were other than annual by the appropriate number of months. However, this process may have resulted in overstated redemption figures for certain WIC vendors in fiscal year 2004, as FNS annualized the redemption figures for all WIC vendors that did not have annual redemption amounts—including those vendors that were not authorized to participate in WIC for the entire fiscal year. As a result of these issues, we determined that we could not use FNS's national TIP data to report trends in redemption amounts over time, or to calculate average annual redemption amounts by vendor type for any particular fiscal year. However, because FNS had requested that WIC state agencies specify the time period used in reporting redemption data for fiscal year 2004, we concluded that we could use the original state data files from that year to calculate average monthly redemption figures.

We converted redemption figures for all WIC-only and regular WIC vendors with valid redemption data into average monthly redemption amounts for any state that reported redemptions in a form other than monthly (see table 5 for these other time periods reported by states to FNS for fiscal year 2004).² For example, for any state that reported redemption

²The majority of WIC state agencies provided redemption data over an average monthly period in fiscal year 2004.

amounts using quarterly figures, we divided each WIC vendor's redemption total by three to create an average monthly figure. In converting redemption amounts, we excluded vendors that were not authorized to participate in the WIC program but that were sometimes included in the state files. When such vendors appeared, they were clearly identified as being unauthorized.

Table 5: Time Periods Other than Monthly That WIC State Agencies Used in Reporting Fiscal Year 2004 Redemption Data to FNS

State	Redemption data reporting period used
Alaska	No valid redemptions reported ^a
Delaware	Quarterly
District of Columbia	Annual
Kentucky	Annual, specifying the number of months in operation
Maine	Annual, specifying the number of months in operation
Maryland	Quarterly
Mississippi	Not applicable ^b
New Hampshire	Annual, specifying the number of months in operation
New Jersey	Quarterly
New Mexico	Annual
Ohio	Annual
Oregon	Annual
Pennsylvania	Annual
Rhode Island	Annual, specifying the number of months in operation
Vermont	Not applicable ^c
Virginia	Annual
West Virginia	Annual

Source: FNS regional office 2004 TIP files.

^aAlaska's WIC state agency did not report valid redemption data for fiscal year 2004; therefore, we excluded Alaska from our redemption analysis. However, Alaska was included in our analysis of national WIC vendor numbers.

^bMississippi did not authorize any WIC-only or regular WIC vendors during fiscal year 2004.

^cVermont did not authorize any WIC-only or regular WIC vendors during fiscal year 2004.

In addition to eliminating specific analysis procedures due to data reliability issues, we narrowed the focus of our analyses to certain geographic areas and WIC vendor types. Because TIP includes data from ITOs and U.S. territories in addition to the 50 states and the District of Columbia, some WIC vendors may have been listed in more than one state

agency TIP file. For example, both a state and an ITO located within that state may have authorized, and thus included in their data file submitted to FNS, the same WIC vendor. To eliminate these potential data-reporting redundancies, our analysis of TIP focused exclusively on the 50 states and the District of Columbia. Concerning our vendor focus, TIP includes some vendor types and additional food delivery systems that are not directly comparable to WIC-only vendors. The noncomparable vendor types include military commissaries, usually located on military installations, and pharmacies, which often only provide infant formula and WIC-eligible medical foods. In addition, some state agencies authorize other food delivery systems, such as home food delivery and direct distribution. We eliminated from our analysis these noncomparable vendors and alternate food delivery systems, and defined our total WIC vendor population as consisting entirely of WIC-only vendors and regular WIC vendors.

Data Analysis

Our findings are the result of two primary analyses. First, we generated frequency statistics concerning the number and location of WIC-only vendors and regular WIC vendors for fiscal years 1999 through 2004, and used geographic information system (GIS) software to map the location of WIC-only vendors in fiscal year 2004. Second, using the original state data we received from FNS's regional offices for fiscal year 2004, we analyzed average monthly WIC redemption amounts by vendor type, both nationally and by state.

Procedures for Determining the Extent to Which WIC-Only and Regular WIC Vendors' Business and Marketing Practices Differ

To identify WIC-only and regular WIC vendors' business and marketing practices, we used two data collection strategies: group telephone interviews with WIC state agency directors, vendor management staff, and local agency staff that participate in vendor monitoring in selected states, and site visits to three of the states selected for telephone interviews. We developed criteria and selected states and officials for the telephone interviews and the site visits.

Sample Selection

Because we were relying on WIC state officials' experience managing their WIC-only and regular WIC vendors to identify their business and marketing practices, we selected states for the telephone interviews that had authorized a substantial number of WIC-only vendors and specified 10 as the minimum number of vendors. Using TIP data for fiscal year 2004 to determine the number of vendors in operation, we selected states that had at least 10 WIC-only vendors that year. During fiscal year 2004, the number of WIC-only vendors in the 16 states that authorized them varied from 1 to 715, but eight states—California, Texas, Florida, North Carolina, Arkansas, Alabama, Georgia, and Louisiana—had 10 or more. We treated Puerto Rico

as a separate case and, because of Hurricane Katrina, excluded Louisiana, leaving seven states for interviews. To select telephone interview respondents, we asked the WIC state agency director to identify staff who had observed WIC-only and regular WIC vendors' business and marketing practices directly through representative monitoring and compliance investigations.

To ensure that we visited establishments with a range of key characteristics, we selected states for site visits from among those with the greatest number of WIC-only vendors—California, Texas, and Florida. We selected vendor establishments to visit in consultation with the WIC state agency director. Our selection criteria included urban and rural locations, years in operation, food price range, and vendor size, measured by WIC redemption volume. The California and Texas WIC state agencies provided us with a list of vendors from which we chose vendors according to our selection criteria. The Florida WIC state agency provided us with a list of vendors that met our criteria. We visited four WIC-only and four regular WIC vendors in each of the three states.

Data Collection

We developed an interview guide with a standard set of questions for the telephone interviews and data collection instruments for the site visits. As a first step, we compiled a list of business and marketing practices from an interview with WIC state agency directors and vendor managers; interviews with representatives of vendor associations, such as the National Grocers Association, the Gulf Coast Retailers Association, and the California Independent Grocers Association; and existing studies of WIC-only vendors. These practices include selling shelf space to manufacturers; location of stores near clinics or military bases; advertising methods such as announcing weekly specials in newspaper ads or placing flyers on windshields in parking lots; incentives offered to participants at no cost, such as strollers, diapers, and bicycles; reduced price offers, such as buy one item, get one free; and transportation for participants to and from the vendor's establishment. For the telephone interviews, we converted the list of practices to a separate set of questions about WIC-only and regular WIC vendors. The site visit data collection instruments covered the same topics as the telephone instrument to permit comparisons of the information provided by WIC state agency staff and our observations of vendor establishments and interviews with store managers. However, the site visit instrument was designed with fixed-response questions in a checklist format to facilitate completion during observation. To complement the observational and interview data, we obtained digital cameras and, with the WIC vendors' permission, took interior and exterior photographs of the vendor establishments we visited.

Data Analysis

For all of the seven states we interviewed by telephone, we prepared a state-level table that synthesized the interview responses separately by vendor type and key business and marketing practice categories. We also prepared summary tables that further aggregated the business and marketing practice data within vendor type for each state. We used the summary tables to make cross-state comparisons. For the site visit interview responses, we created a matrix to summarize key findings on store characteristics, illustrative price data, and selected business and marketing practices.

Scenario Analyses of WIC-Only Vendors' Contribution to WIC Program Expenditures, if Their Market Share Increases

In order to assess WIC-only vendors' contribution to WIC program food expenditures, if their market share increased, we developed two scenarios, based on available data for 2004 (the latest data available). In these scenarios we asked:

- *Scenario 1:* What would have happened to the number of food vouchers that could have been issued and the number of WIC participants that could have been served in 2004, if we increased the number of food vouchers redeemed at WIC-only vendors while holding program food expenditures constant at fiscal year 2004 levels?
- *Scenario 2:* What would have happened to program food expenditures in 2004 if we increased the number of food vouchers redeemed at WIC-only vendors while program expenditures were not held constant and the number of food vouchers issued to program participants remained at the 2004 level?

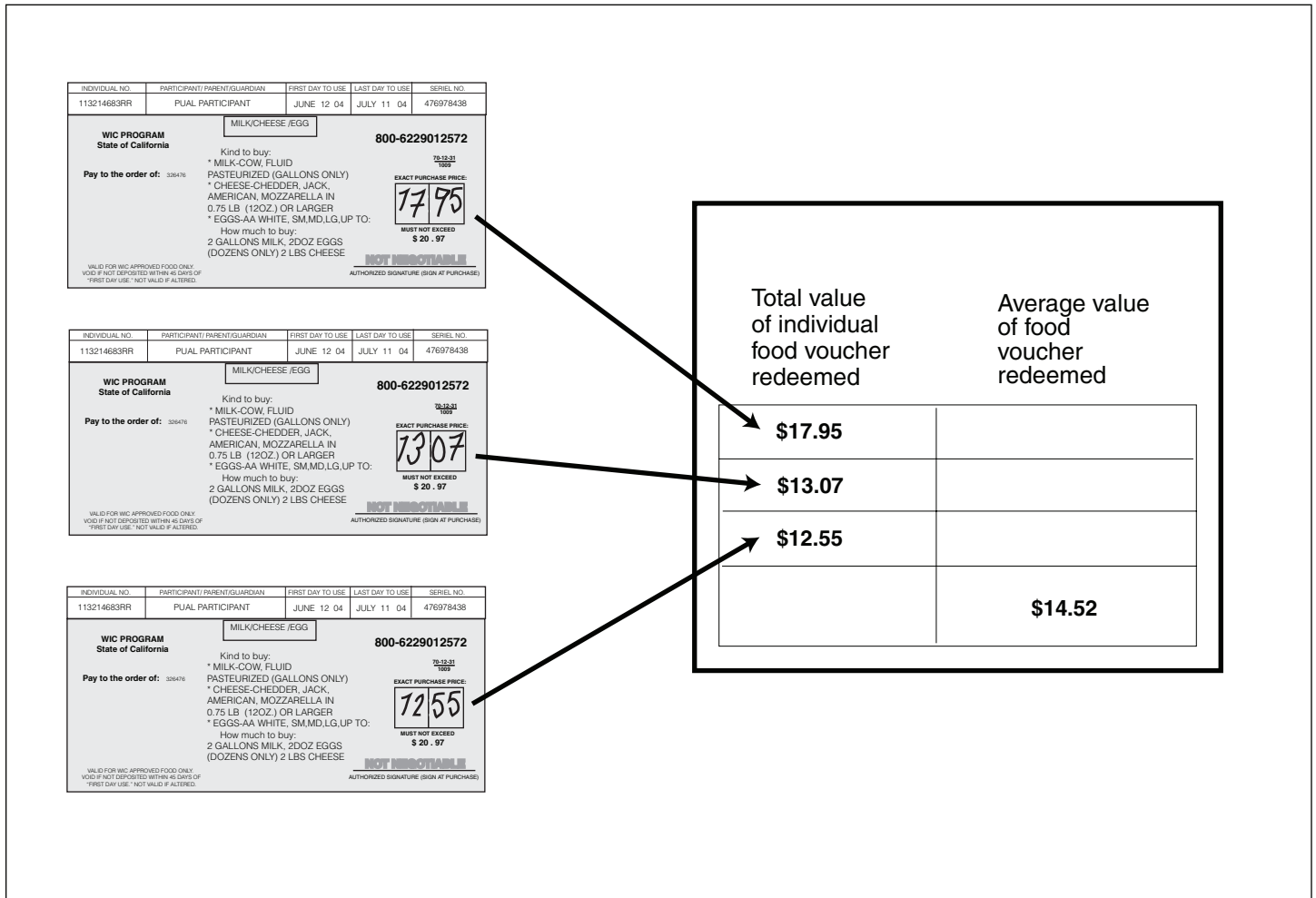
Data Collection

We obtained copies of administrative data files from WIC state agencies' management information systems in California, Texas, and Florida. These data included information on every food voucher that had actually been redeemed—that is, submitted for payment and paid—in these states. The unit of measure in our data was the value of a redeemed food voucher, and the data consisted of values for more than 100 million vouchers.

Using these data, we could determine the actual number of food vouchers redeemed at WIC-only and regular WIC vendors for each of the three states, as well as the average value of all food vouchers redeemed at WIC-only and regular WIC vendors in each state. For example, figure 12 depicts the information available on three representative food vouchers and how we combined the values for these individual vouchers (e.g., \$17.95, \$13.07, and \$12.55) to determine the average value of all vouchers redeemed (e.g.,

\$14.52). We did this for all vouchers for WIC-only and regular WIC vendors in California, Texas, and Florida.

Figure 12: Example of the Average Value of Food Vouchers Redeemed by a WIC-Only Vendor



Source: GAO analysis.

Even though we were able to calculate the average value of all redeemed food vouchers for WIC-only and regular WIC vendors, we were not able to determine whether prices for individual food items were higher at WIC-only vendors than at regular WIC vendors. In order to answer that type of detailed question, we would have needed additional information that was not available because of the way data are collected by the states. Specifically, we would have needed the price of the individual food items

listed on the voucher and the quantity of each food item purchased, in addition to the total redeemed value. Figure 13 shows hypothetical vouchers from two vendors that include the type of information that would have been needed for such an analysis. It specifies that 2 gallons of milk were purchased at \$3.57 per gallon for a total expenditure of \$7.14. However, the data files we received did not contain either the price or the quantity purchased for individual vouchers.

Figure 13: Example of Hypothetical Vouchers Specifying Price and Quantity

WIC voucher 1				WIC voucher 2			
Product	Quantity	Unit price	Total price	Product	Quantity	Unit price	Total price
Milk	2 gal.	\$ 3.57	\$ 7.14	Milk	2 gal.	\$ 7.00	\$ 14.00
Eggs	2 doz.	\$ 1.31	\$ 2.62	Eggs	2 doz.	-	\$ 0
Cheese	2 lbs.	\$ 4.09	\$ 8.18	Cheese	2 lbs.	-	\$ 0
<i>Total</i>			\$ 17.95	<i>Total</i>			\$ 14.00

Source: GAO analysis.

Without information on the quantity and price of the items on food vouchers, WIC participants would not know the value of the items they received and could not be price sensitive. WIC agencies would also not be able to determine the prices of the items they redeemed or whether participants received the total quantity of products specified on the voucher. Without this information, it is difficult to know why average redemption values differ.

Figure 13 illustrates why it is important to know the quantity actually redeemed by the participant. For example, as shown in voucher 1 in the figure, the participant received the full quantity of food specified on the voucher. The average value of all items is \$17.95. In voucher 2, the average value of the voucher at \$14.00 is less expensive. The participant, however, did not buy eggs or cheese and did not receive the full quantity of food specified on the voucher. If the voucher represents a prescription designed to fulfill shortfalls in the participant’s nutritional needs, the partial fulfillment suggests that although the average value of voucher 2 is less than in voucher 1, the actual delivery of the food has not been achieved.

Voucher 2 in figure 13 also demonstrates why it is necessary to know the price of individual items on the voucher. Without this information, it is not possible to know whether the prices at one vendor are higher than prices at another vendor. In voucher 2, the total value of the voucher is less than in voucher 1, yet the price charged for a gallon of milk is significantly higher. Use of the average value of the voucher of \$14.00 clearly does not prove that prices at the second vendor are less than prices at the first vendor with the higher average value of \$17.95.

In addition, it is important to collect the actual price of the sales transaction—collected at the point of sale—rather than a shelf price. This is because the price listed on the shelf may not be the actual price of the transaction. For example, if milk is being sold as a loss leader at the vendor represented by voucher 1, it is possible that the price on the shelf is actually \$7.00 per gallon even though the price on the voucher is \$3.57 per gallon.

We also would have needed information on such things as the size and location of stores to further determine why prices and average values may have varied between WIC-only and regular WIC vendors in the states.

The model

To answer the questions presented in these two scenarios, we used the following equation for the sum of WIC-only and regular WIC retail vendor food expenditures:

1) (program food expenditures for WIC-only vendors) + (program food expenditures for regular WIC vendors) = total WIC program food expenditures, or:

$$2) q_w x_w + q_r x_r = F_{04}$$

Where,

$q_w x_w$ = program food expenditures for WIC-only vendors where

q_w = number of vouchers redeemed by WIC-only vendors

x_w = average value of vouchers redeemed by WIC-only vendors

$q_r x_r$ = program food expenditures for regular WIC vendors where

q_r = number of vouchers redeemed by regular WIC vendors

x_r = average value of vouchers redeemed by regular WIC vendors

F_{04} = total WIC program food expenditures for fiscal year 2004

Table 6 shows the actual data for 2004 for California and can be used to demonstrate the application of the model. The number of vouchers redeemed by WIC-only vendors (q_w) equaled 28,866,000, the average value of vouchers redeemed (x_w) equaled \$13.15.³ Conversely, the number of vouchers redeemed by regular WIC vendors (q_r) equaled 40,745,000, the average value of vouchers redeemed (x_r) equaled \$12.28. Total WIC program food expenditures for California for fiscal year 2004 (F_{04}) equaled \$880,096,000. These data can be used in the formula to obtain the following:

$$3) (28,866,000 * \$13.15) + (40,745,000 * \$12.28) = \$880,096,000^4$$

³For each state, we computed the number of redeemed vouchers as the total count of records in each state data file excluding vouchers redeemed at commissaries and pharmacies. In addition, we removed, on the advice of and in consultation with state representatives, any record that appeared to contain an anomaly such as missing an instrument ITEM number code, missing a vendor TYPE code, having a redeemed amount greater than the maximum allowable amount, or having a negative redeemed amount.

⁴Numbers may not add because of rounding. The total is the result of numbers and calculations carried out using more significant digits than shown and is accurate.

Table 6: Example of Application of Model to Actual Data for California

	WIC-only vendors		Regular WIC vendors		Total	
	Number of vouchers redeemed	Average value of food vouchers redeemed	Number of vouchers redeemed	Average value of food vouchers redeemed	Total number of food vouchers redeemed	Total WIC program food expenditures
California	Thousands	Dollars	Thousands	Dollars	Thousands	Thousands
2004 Actual	28,866	\$13.15	40,745	\$12.28	69,611	880,096

Source: GAO analysis of California WIC state agency redemption data for 2004.

Scenario 1:

In the first scenario, we wanted to see how participation would change in California, Texas, and Florida in 2004 if the number of vouchers redeemed at WIC-only vendors increased while holding total WIC program food expenditures constant at 2004 levels. We did this by increasing the number of vouchers redeemed at WIC-only vendors in the states in 2004 by a hypothetical 10, 20, 30, 50, and 100 percent. Because we increased the number of food vouchers redeemed at WIC-only vendors, and do not allow total WIC program food expenditures to increase, the total number of vouchers for WIC-only and regular WIC vendors that can be issued depends, in part, on whether the average value of redeemed vouchers is higher for WIC-only vendors. If the average value is higher, fewer food vouchers could be issued under this scenario and thus fewer participants could be served. This would be reflected in our scenario by a reduction in the number of vouchers redeemed by regular WIC vendors. We calculated this change in the number of vouchers redeemed by regular WIC vendors by using equation 2a, which is equation 2 transformed.⁵ We calculated the number of vouchers that would have been redeemed at regular WIC vendors q_r for each hypothetical increase. All else was held constant at 2004 levels.

$$2a.) q_r = ((F_{04} - q_w x_w)/x_r)$$

We then used these new quantities calculated for WIC-only and regular WIC vendors under each of the hypothetical increases to determine the program food expenditures for each of the vendors. Examples of the

⁵ Equation 2 is transformed to 2a in the following manner:

$$q_w x_w + q_r x_r = F_{04}$$

$$q_r x_r = (F_{04} - q_w x_w)$$

$$q_r = ((F_{04} - q_w x_w)/x_r)$$

scenario results for California are presented in table 7. In the case of a 100 percent increase in WIC-only vendor redemptions, we increased the number of WIC-only redemptions from the actual value in 2004—28,866,000 by a hypothetical 100 percent to 57,732,000. The resulting number of redemptions for regular WIC vendors, as calculated in formula 2a, decreased from the 2004 value of 40,745,000 to 9,827,000. All else—the average value of redeemed vouchers for WIC-only (\$13.15) and regular WIC vendors (\$12.28), as well as total WIC program food expenditures (\$880,096,000)—is held constant.

Table 7: Example of Calculation of WIC-Only and Regular WIC Vendors’ Number and Average Value of Food Vouchers for California

	WIC-only vendors		Regular WIC vendors		Total	
	Number of food vouchers redeemed	Average value of food vouchers redeemed	Number of food vouchers redeemed	Average value of food vouchers redeemed	Total number of food vouchers redeemed	Total WIC program food expenditures
California	Thousands	Dollars	Thousands	Dollars	Thousands	Thousands
100% increase	57,732	\$13.15	9,827	\$12.28	67,560	\$880,096

Source: GAO analysis of California WIC state agency redemption data for 2004.

This decline in the number of vouchers redeemed at regular WIC vendors results from the restriction in the analysis of keeping total WIC program food expenditures constant at 2004 levels. This decline occurs because according to our calculations based on all food vouchers for the state, the average value of food vouchers redeemed at WIC-only vendors is somewhat higher than the average value at regular WIC vendors.

Calculating the Number of Participants

We calculated the number of participants who might be affected by the change in the scenario. We did this by adding together the number of vouchers redeemed at WIC-only and regular WIC vendors in 2004 and under each hypothetical increase in the scenario for each of the three states. For example, in California, a total of 69,611,000 vouchers were redeemed in 2004 (table 6). As shown in table 7, for a doubling in the number of vouchers redeemed by WIC-only vendors, we estimated a total of 67,560,000 vouchers.

In the absence of more specific information on participation, we simply divided the total number of vouchers redeemed by the average number of vouchers redeemed per participant for each of the states. For example, in

California we estimated 32.69 vouchers per participant.⁶ We used that information to estimate that there were 2,130,000 participants in 2004, (69,611,000 / 32.69). Conversely, as shown in table 8, if the redemptions of vouchers by WIC-only vendors doubled, we estimated that 2,067,000 participants (67,559,000 / 32.69) would be affected.

As shown in table 8, in California, the difference between the number of participants in 2004 and the estimated number of participants if WIC-only vendor redemptions increased 100 percent (2,067,000-2,130,000) indicated a decline of 63,000 participants that could be served. In California, this represented about 3 percent of the number of participants in 2004, ((63,000 / 2,130,000)*100).

Table 8: Example Calculation of Decline in Number of Participants for California

	Total number of vouchers redeemed, all vendors	Average number of vouchers redeemed per person	Number of participants
California	Thousands	Number	Thousands
2004 actual	69,611	32.69	2,130
100 percent increase in vouchers redeemed at WIC-only vendors	67,560	32.69	2,067
Decline in vouchers and participants	-2,052	0	-63

Source: GAO analysis of California WIC state agency redemption data for 2004.

Note: Numbers may not add because of rounding.

Scenario 2:

In the second scenario, we wanted to see how expenditures that had been held constant in the previous scenario would have to change in order to maintain the level of program participation constant at 2004 levels when the market share of WIC-only vendors increased. As in the previous scenario, we increased the number of redeemed food vouchers for WIC-only vendors (q_w) by a hypothetical 10, 20, 50, and 100 percent. While

⁶The number of vouchers per participant is based on the number of unique people who redeemed a voucher, that is, people who are counted only once even if they came back multiple times. For California, we computed the number of participants as a count of all unique INDIVIDUAL_ID values. This was defined in the California data documentation as a “system generated 11 character identifier unique to an individual”. The Individual ID can remain constant throughout the participant’s entire eligibility period with WIC. For Texas, we computed the number of participants as a count of all unique CID (Unique Number Identifying A Client) values in the file. For Florida, we asked the state agency for “the number of unique people who redeemed any type of food instrument in FY2004”. Florida provided us with an “Unduplicated count for FFY04”. The number of vouchers per participant was computed as the number of vouchers/number of participants.

keeping the total number of vouchers redeemed constant at 2004 levels, we again used equation 2a to calculate the number of redeemed vouchers for regular WIC vendors (q_r). We allowed total expenditures to increase (F_{04}). We then looked at the difference between that new level of expenditures and 2004 levels and then calculated what that change represented as a percentage of 2004 levels.

Results of the Analysis for
Scenario 1

The results of the analysis for scenario 1 are presented in the next two tables. As shown in table 9, if the number of food vouchers redeemed in California at WIC-only vendors doubled, the number would increase from 28.8 million to 57.7 million, while the number at regular WIC vendors would decline from 40.7 million to 9.8 million.

Table 9: Results of the Calculation of WIC-Only and Regular WIC Vendors' Number and Average Value of Food Vouchers for California, Texas, and Florida

Actual and scenario increases in vouchers at WIC-only vendors	WIC-only vendors		Regular WIC vendors		Total WIC program food expenditures
	Number of food vouchers redeemed	Average value of food vouchers redeemed	Number of food vouchers redeemed	Average value of food vouchers redeemed	
California	Thousands	Dollars	Thousands	Dollars	Thousands
2004 actual	28,866	\$13.15	40,745	\$12.28	880,096
10 % increase	31,753	13.15	37,653	12.28	880,096
20% increase	34,639	13.15	34,561	12.28	880,096
30 % increase	37,526	13.15	31,470	12.28	880,096
50 % increase	43,299	13.15	25,286	12.28	880,096
100% increase	57,732	13.15	9,827	12.28	880,096
Texas					
2004 actual	1,808	31.55	20,988	21.72	512,976
10 % increase	1,989	31.55	20,726	21.72	512,976
20% increase	2,170	31.55	20,463	21.72	512,976
30 % increase	2,350	31.55	20,201	21.72	512,976
50 % increase	2,711	31.55	19,675	21.72	512,976
100% increase	3,616	31.55	18,362	21.72	512,976
Florida					
2004 actual	1,562	22.92	10,641	18.50	232,709
10 % increase	1,719	22.92	10,447	18.50	232,709
20% increase	1,875	22.92	10,254	18.50	232,709
30 % increase	2,031	22.92	10,060	18.50	232,709
50 % increase	2,343	22.92	9,673	18.50	232,709
100% increase	3,125	22.92	8,706	18.50	232,709

Source: GAO analysis of California, Texas, and Florida WIC state agency redemption data for 2004.

WIC-only vendors account for a much smaller share of the WIC market in Texas and Florida than in California. In Texas, for example a doubling of the WIC-only vendors' market share would result in an increase in the number of food vouchers redeemed from 1.8 million to 3.6 million—with the number of food vouchers redeemed at regular WIC vendors decreasing from 20.9 million to 18.3 million.

For Florida, the doubling of WIC-only vendors' market share would result in an increase in the number of food vouchers redeemed from 1.6 million

to 3.1 million—with the number of food vouchers redeemed at regular WIC vendors decreasing from 10.6 million to 8.7 million.

In all the states, the average value of vouchers redeemed at WIC-only vendors was higher than the average value of vouchers redeemed at regular WIC vendors. The value for California was calculated as \$13.15, while the value for regular WIC was \$12.28, with a difference of \$0.87 between the two types of vendors. In Texas, the average value of vouchers redeemed at WIC-only vendors was calculated to be \$31.55, while the value for regular WIC vendors was \$21.72—a difference of \$9.83. In Florida, WIC-only voucher redemptions averaged \$22.92 in value, while the value for regular WIC was \$18.50—a difference of \$4.42. In addition, according to our analysis, the average value of vouchers redeemed at regular WIC vendors was lowest in California, at \$12.28, followed by Florida at \$18.50 and Texas at \$21.72. The difference in the average value of vouchers redeemed should be treated with a great deal of caution. Because we used the average value of all food vouchers in our analysis without knowing the price or quantity of the individual food items that made up the vouchers, we could not determine if the higher average value meant that prices for individual food items were higher at WIC-only vendors. As described earlier, the data represent the average value of the vouchers, not prices for specific food items. These data do not enable us to make price comparisons between the two types of vendors. In addition, this analysis does not allow us to determine why the average values in vouchers redeemed may be higher. To do that, we would need enough data on the costs vendors incurred in obtaining the food items as well as an understanding of the factors affecting those costs, such as store size, store location, marketing conditions and business practices, and any other factors affecting food item prices, to identify the factors affecting voucher values.

The results of our calculation of the decline in the number of participants due to the increase in WIC-only vendors' market share are presented in table 10. The number of redemptions as reported to us by each of the states was 33 per participant in California, 16 in Texas, and 18 in Florida. The decline in the number of participants ranged from less than 1 percent for a 10 percent increase in the number or redemptions at WIC-only vendors to about 3 percent for a 100 percent increase.

Table 10: Results of the Calculation of Decline in Number of Participants for California, Texas, and Florida

Actual and scenario increases in food vouchers at WIC-only vendors	Total number of vouchers, all vendors	Average number of vouchers per person	Number of participants	Decline in number of participants	Decline in number of participants as a percentage of 2004
	Thousands	Number	Thousands	Thousands	Percent
California					
2004 actual	69,611	33	2,130	-	
10 % increase	69,406	33	2,123	-6	0.29
20% increase	69,201	33	2,117	-13	0.59
30 % increase	68,996	33	2,111	-19	0.88
50 % increase	68,585	33	2,098	-31	1.47
100% increase	67,560	33	2,067	-63	2.95
Texas					
2004 actual	22,796	16	1,469	-	
10 % increase	22,715	16	1,464	-5	0.36
20% increase	22,633	16	1,458	-11	0.72
30 % increase	22,551	16	1,453	-16	1.08
50 % increase	22,387	16	1,443	-26	1.79
100% increase	21,978	16	1,416	-53	3.59
Florida					
2004 actual	12,203	18	679	-	
10 % increase	12,166	18	677	-2	0.31
20% increase	12,129	18	675	-4	0.61
30 % increase	12,091	18	673	-6	0.92
50 % increase	12,017	18	669	-10	1.53
100% increase	11,831	18	658	-21	3.05

Source: GAO analysis of California, Texas and Florida WIC state agency redemption data for 2004.

Results of the Analysis for Scenario 2

The results of our analysis for scenario 2 are shown in table 11. Expenditures for WIC-only vendors in California increased from \$380 million for a 10 percent increase to \$759 million for a doubling of their market share. Expenditures changed by \$2.5 million for the 10 percent increase to \$25 million for a 100 percent increase in WIC-only market share.

Table 11: Results of Allowing Program Food Expenditures to Increase for California, Texas, and Florida

Actual and scenario increases in vouchers at WIC-only vendors	Program food expenditures by vendor type		Total program food expenditures		Change in total program food expenditures as a percentage of 2004
	WIC-only vendors	Regular WIC vendors	Total food expenditures	Change in food expenditures under scenarios	
California	Thousand dollars	Thousand dollars	Thousand dollars	Thousand dollars	Percent
2004 actual	379,704	500,392	880,096		
10 % increase	417,674	464,942	882,616	2,520	0.29
20% increase	455,644	429,491	885,135	5,039	0.57
50 % increase	569,555	323,139	892,694	12,598	1.43
100% increase	759,407	145,885	905,292	25,196	2.86
Texas					
2004 actual	57,046	455,930	512,976		
10 % increase	62,751	452,002	514,753	1,777	0.35
20% increase	68,455	448,075	516,530	3,554	0.69
50 % increase	85,569	436,292	521,861	8,885	1.73
100% increase	114,092	416,654	530,746	17,770	3.46
Florida					
2004 actual	35,801	196,907	232,709		
10 % increase	39,382	194,016	233,398	689	0.30
20% increase	42,962	191,125	234,087	1,378	0.59
50 % increase	53,702	182,452	236,154	3,446	1.48
100% increase	71,603	167,997	239,600	6,891	2.96

Source: GAO analysis of California, Texas, and Florida WIC state agency redemption data for 2004.

In Texas, program food expenditures in the scenario increased from \$1.8 million to \$17.8 million, while expenditures increased from \$689,000 to \$6.9 million in Florida. In all three states the increase represented from less than 1 percent to about 3 percent of 2004 values.

Limitations

The scenarios presented are based on the best data available at the time of the analysis. The results, however, are illustrative and leave unanswered some fundamental questions, including whether WIC-only vendors charge higher prices for food items and if so why the prices would be higher and what is the overall effect on total program food expenditures and participation. In order to more fully answer these questions, we would have to know more about the actual prices and quantities of individual food items on the redemption vouchers. Any price comparison would have to be for similar products of similar quantity and quality. In addition, we

would also have to know the factors that may be influencing prices. This would include such things as the costs for obtaining the product, as well as the difference between that cost and price. In addition, even if price differences exist, certain factors affecting the store's costs—the size of the store, the location of the store, and the general market structure in which the store operates—may help explain the price differences. In the case of the WIC market, the role of the program itself cannot be ignored; for example, that participants are not price sensitive. Thus to fully understand the price difference between WIC-only and regular WIC vendors, we would need not only additional data but a different framework of analysis that would allow us to hold various factors constant while changing others. This type of detailed analysis would require significant resources to gather the data and, in addition, would probably be limited in scale to cover local rather than national WIC markets.

Appendix II: Number of WIC-Only Vendors, Fiscal Years 1999-2004

State	1999	2000	2001	2002	2003	2004
Alabama	0	0	0	3	4	19
Arkansas	4	4	9	0	0	42
California	235	303	378	516	653	715
District of Columbia	0	0	0	1	1	1
Florida	57	78	90	106	109	109
Georgia	0	0	0	0	0	22
Kansas	0	0	0	0	1	3
Louisiana	4	5	4	6	13	11
Maryland	0	0	0	1	1	0
Missouri	0	1	0	0	0	0
New Mexico	4	4	4	4	4	7
North Carolina	2	11	18	29	44	72
Oklahoma	5	6	6	6	6	8
Oregon	5	7	7	0	0	0
Tennessee	2	2	2	3	2	1
Texas	69	89	86	81	116	162
Utah	2	1	1	1	1	2
Virginia	5	12	16	22	6	6
Total WIC-only vendors	394	523	621	779	961	1,180

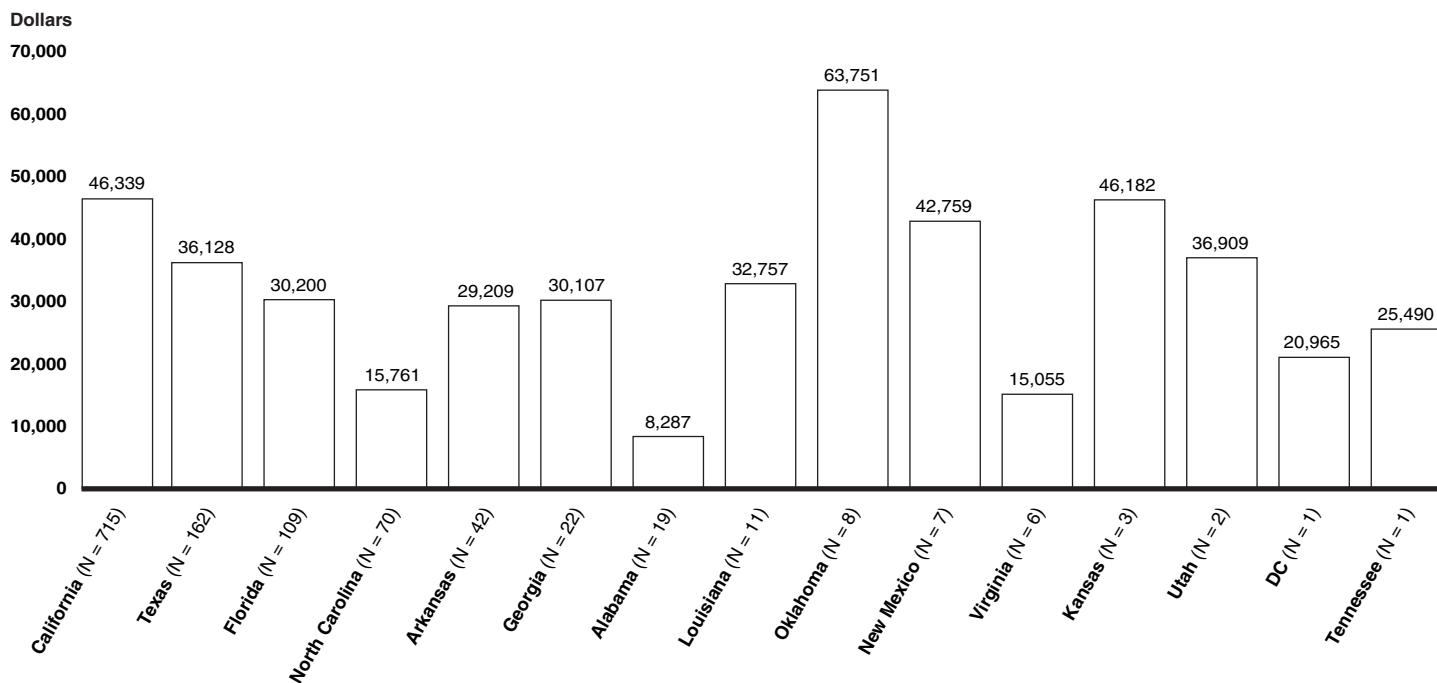
Source: GAO analysis of FNS 1999-2004 TIP data.

Note: Vendor counts include any vendor in operation at some point during the fiscal year. States not listed did not authorize any WIC-only vendors at any time during any of the fiscal years listed.

Appendix III: Average Monthly Redemptions per WIC-Only Vendor by State in Fiscal Year 2004

The figure below shows the average monthly redemptions per WIC-only vendor and the number of these vendors in the 15 states (including the District of Columbia) with them in fiscal year 2004.

Figure 14: Average Monthly Redemptions per WIC-Only Vendor by State in Fiscal Year 2004



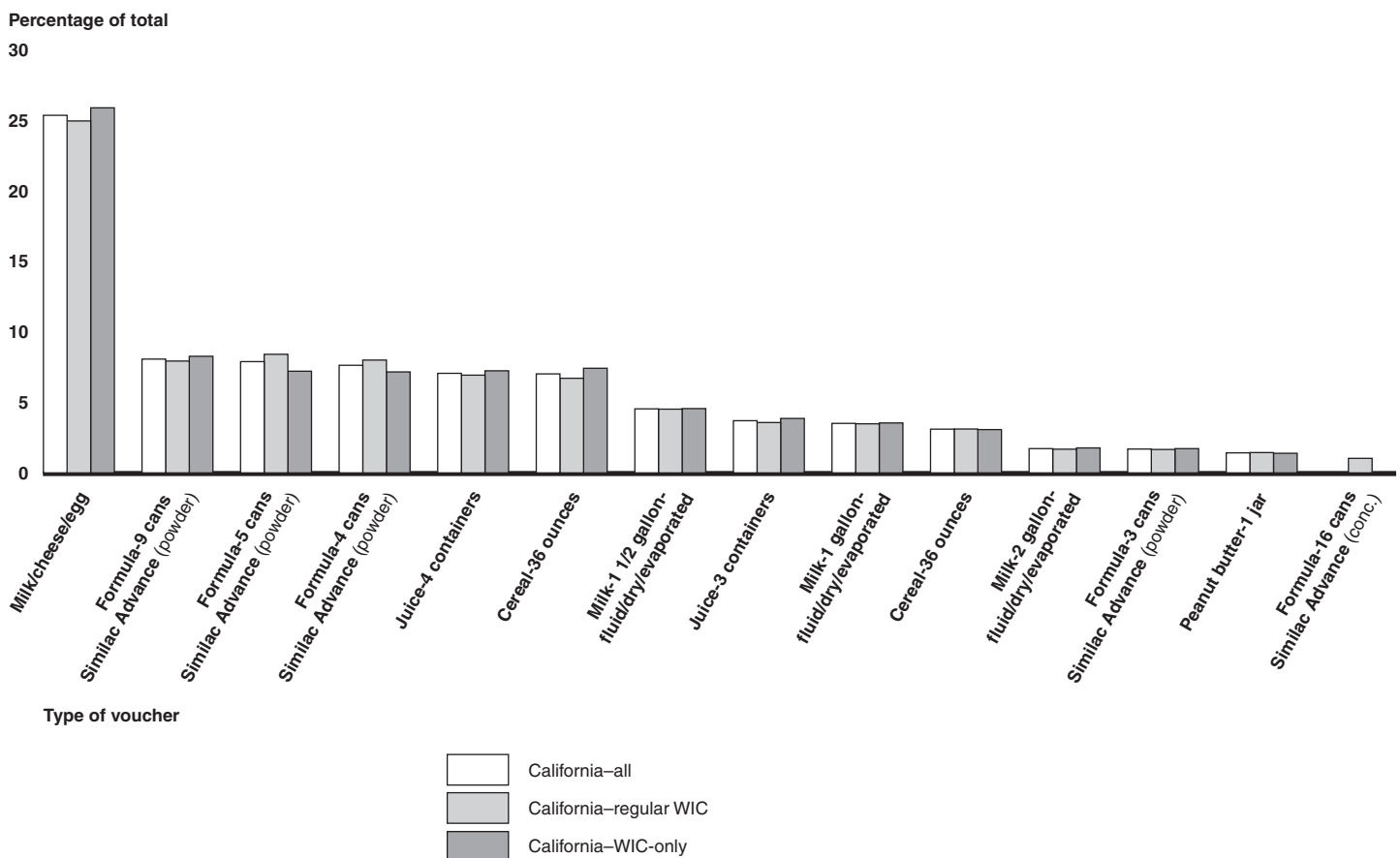
Source: GAO analysis of FNS regional office 2004 TIP files.

Note: N = number of WIC-only vendors with valid redemption data in fiscal year 2004. States are listed from left to right with decreasing numbers of WIC-only vendors.

Appendix IV: WIC Vouchers Most Frequently Used at WIC-Only and Regular WIC Vendors in California, Texas and Florida

The figures below show the most frequently used vouchers for WIC-only and WIC regular vendors as well as the state total. We defined “most frequently” used as those that accounted for more than 1 percent of the total. The figures indicate that both WIC-only and regular vendors are redeeming the same type of vouchers.

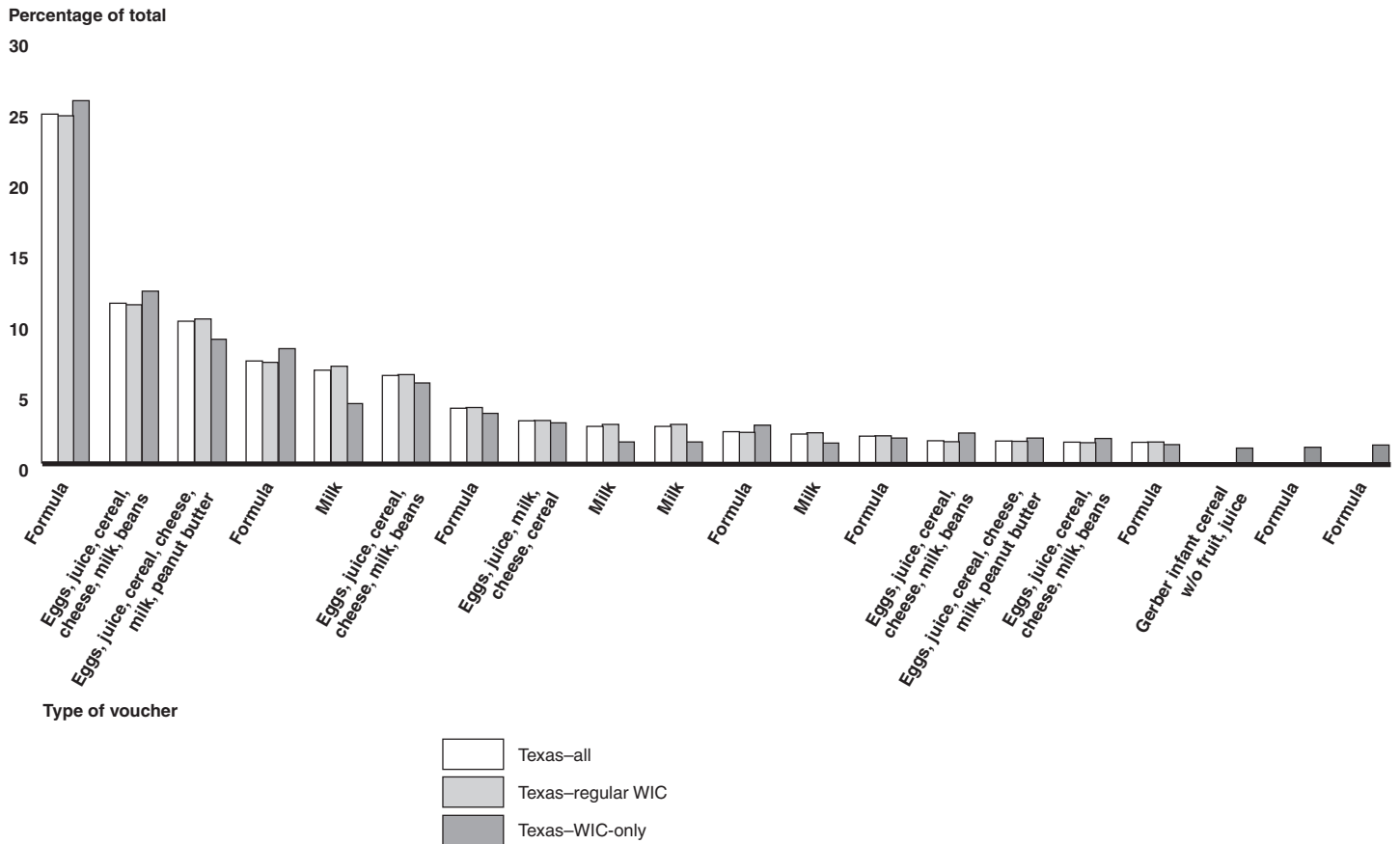
Figure 15: Most Frequently Used Vouchers for WIC-Only, Regular and State Total for California, 2004



Source: GAO analysis of California WIC state agency redemption data for 2004.

Appendix IV: WIC Vouchers Most Frequently Used at WIC-Only and Regular WIC Vendors in California, Texas and Florida

Figure 16: Most Frequently Used Vouchers for WIC-Only, Regular and State Total for Texas, 2004



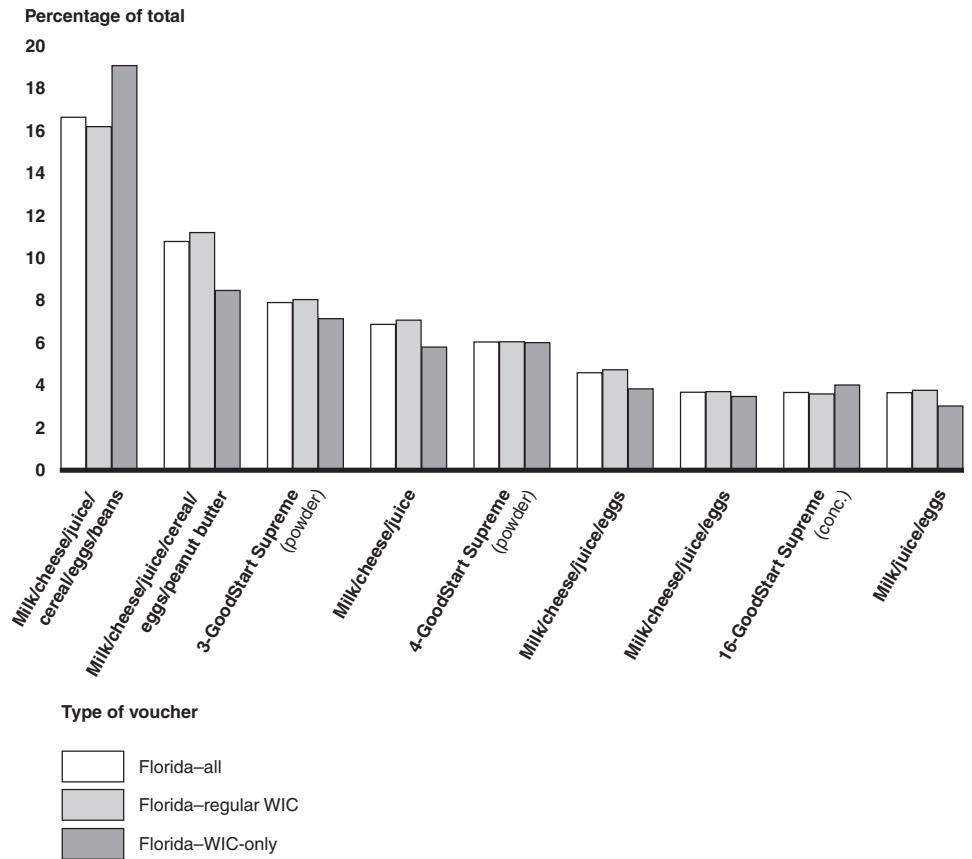
Source: GAO analysis of Texas WIC state agency redemption data for 2004.

**Appendix IV: WIC Vouchers Most Frequently
Used at WIC-Only and Regular WIC Vendors
in California, Texas and Florida**

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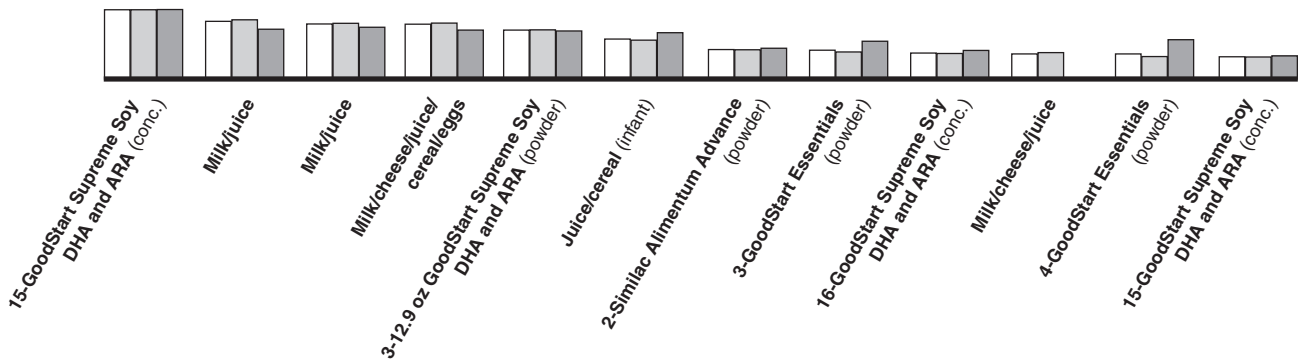
Appendix IV: WIC Vouchers Most Frequently Used at WIC-Only and Regular WIC Vendors in California, Texas and Florida

Figure 17: Most Frequently Used Vouchers for WIC-Only, Regular and State Total for Florida, 2004



Source:GAO analysis of Florida WIC state agency redemption data for 2004.

Appendix IV: WIC Vouchers Most Frequently Used at WIC-Only and Regular WIC Vendors in California, Texas and Florida



Appendix V: GAO Contacts and Staff Acknowledgments

GAO Contact

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