PREFACE

This report describes findings of research to measure the effect of the Food Stamp Program on retail food sales. Specifically, it compares food sales in a sample of food stores in Avoyelles Parish, La., before and after the initiation of the Food Stamp Program.

Since the Program's inception in mid-1961, there has been a continuing research effort by the Department to evaluate its impact on food consumption, nutritional intake by participants, food retailing, and farm income.

Findings from this research supplement previous findings of changes in retail food store sales in the eight areas in which the Program was first initiated on a pilot basis in 1961.

The research was conducted under the general supervision of Robert E. Frye. Cleveland P. Eley assisted in collecting field data.

Previous Reports Published on Food Stamp Program Evaluation

Havas, Nick, and Frye, Robert E.
Pilot Food Stamp Program, Its Effect on Retail Food Store Sales In Fayette County, Pa., and McDowell County, W. Va.
U.S. Dept. Agr., Agr. Econ. Rpt. 29. April 1963.

Frye, Robert E.
Effect of the Pilot Food Stamp Program on Retail Food Store Sales.
U.S. Dept. Agr., Agr. Econ. Rpt. 8. April 1962.

Reese, Robert B., and Adelson, Sadye F.
Food Consumption and Dietary Levels Under the Pilot Food Stamp Program.
U.S. Dept. Agr., Agr. Econ. Rpt. 9. June 1962.

U.S. Agricultural Marketing Service.
The Food Stamp Program--An Initial Evaluation of the Pilot Projects.
AMS-472. April 1962.

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HIGHLIGHTS

Sales of retail food stores, adjusted for seasonal influence, rose 7 percent during a 4-week period in June-July 1963 compared with a 4-week period in January-February of the same year. The increase in sales was attributed to the introduction of the Food Stamp Program in the area. Sales, unadjusted for seasonal influence, rose about 14 percent during the 4 weeks.

Dollar volume of food coupons redeemed in sample stores during the Program period totaled nearly $45,000, or 9 percent of sales volume.

Of the three major food groups handled by retailers, meat sales rose most--increasing 25 percent. Grocery sales rose 12 percent. Produce sales dropped nearly 10 percent, mostly because fresh produce was available from sources other than retail food stores. Sales by individual food groups were not adjusted for seasonality.

Data furnished by four general-line grocery wholesalers showed that during the first 6 months of the Program, March-August 1963, sales were 7 percent higher than the average for this period during the 3 years 1960-62, when the Program was not in operation. Specialty wholesalers revealed that their sales of meat, bakery, and dairy products also benefited from the Stamp Program. These findings coincide with those found at the retail level and confirm the views of food wholesalers that the Program stimulated business.

Participation in the Food Stamp Program was seasonal. The number participating was highest in April and lowest during September, and varied inversely with the level of employment. In Avoyelles, employment was highest during the summer and early fall.

For the first 7 months of the Program's operation, monthly participation averaged nearly 7,000 persons, or 18 percent of Avoyelles' total population. On the average, participants received nearly $82,000 worth of coupons each month. Of this amount, about $48,000 was given free; this was the Federal Government's contribution to the Program.

Dollar value of free coupons issued monthly to participants approximated the value of foods distributed in Avoyelles each month under the Commodity Donation Program which operated for 11 months in the area. The Food Stamp Program replaced the Commodity Donation Program.

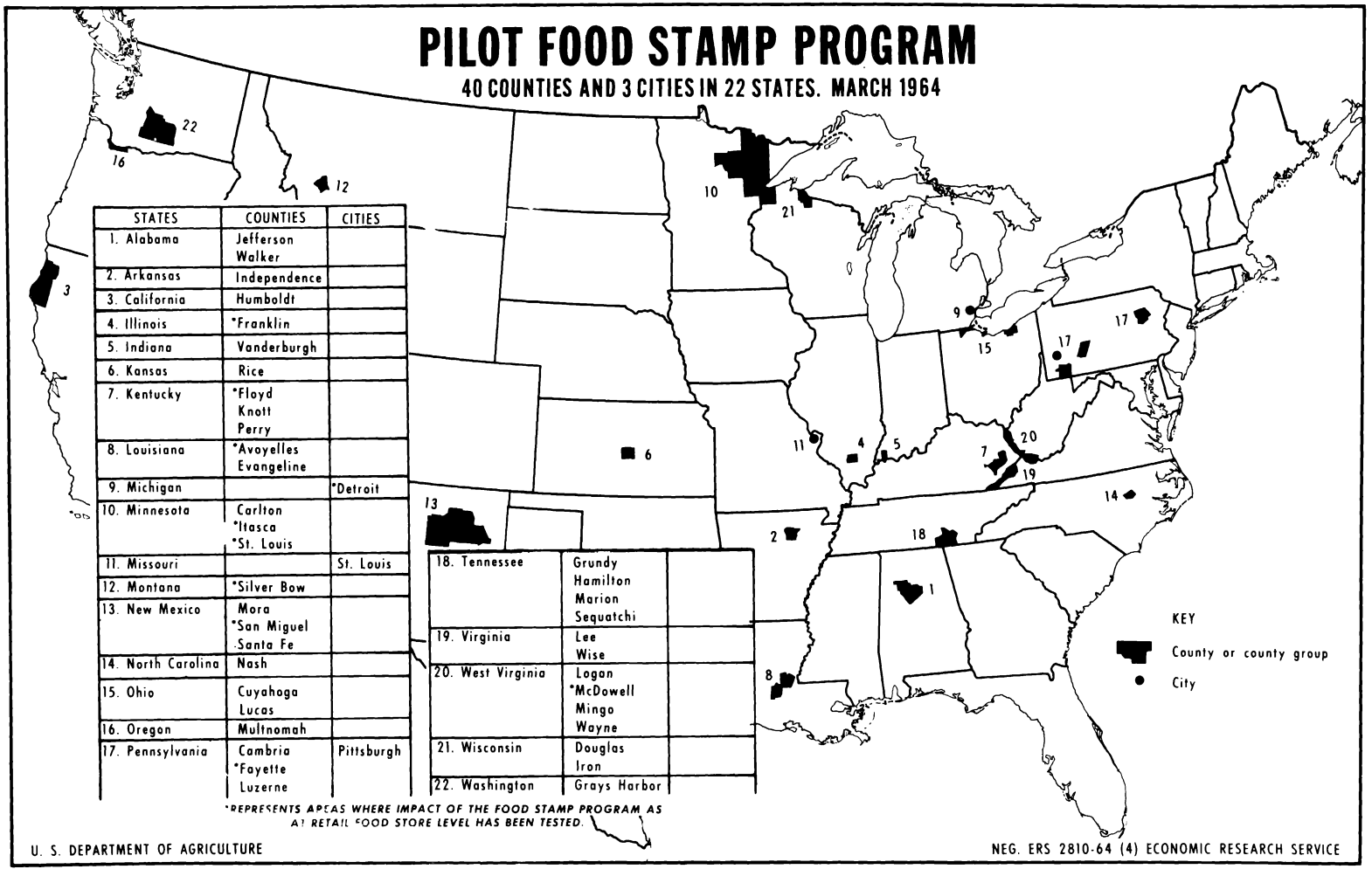
Retail stores in all size categories felt the impact of the Stamp Program through the increased purchasing power it generated. Although sales gains and volume of food coupons redeemed by sample stores varied considerably, neither factor appeared to be closely related nor significantly influenced by size of store.

Food coupons increased total food sales in Avoyelles. In general, stores that had the largest portion of total sales accounted for by food coupons also had the largest percentage increase in total sales.

Surveys conducted previously in other areas where the Food Stamp Program was introduced showed that some retailers made special effort through advertising and in-store promotion to attract the patronage of coupon-holding customers. However, there was no evidence of such an appeal in Avoyelles Parish, and participants continued to shop in the same store or stores as they did before the Program began. As a result, stores which had a significant portion of regular customers eligible for the Program retained them.

Informal opinions of trade representatives and persons connected with the administration of the Food Stamp Program were that the Program was successful in Avoyelles. Both retailers and participants were favorably impressed with it. Most retailers felt that the Program benefited their business.

Overall findings regarding the impact of the Stamp Program on retail food store sales in Avoyelles Parish generally confirmed the positive effect on sales found in other areas where the Program has been evaluated.



STATES	COUNTIES	CITIES
1. Alabama	Jefferson Walker	
2. Arkansas	Independence	
3. California	Humboldt	
4. Illinois	*Franklin	
5. Indiana	Vanderburgh	
6. Kansas	Rice	
7. Kentucky	*Floyd Knott Perry	
8. Louisiana	*Avoyelles Evangeline	
9. Michigan		*Detroit
10. Minnesota	Carlton *Itasca *St. Louis	
11. Missouri		St. Louis
12. Montana	*Silver Bow	
13. New Mexico	Mora *San Miguel Santa Fe	
14. North Carolina	Nash	
15. Ohio	Cuyahoga Lucas	
16. Oregon	Multnomah	
17. Pennsylvania	Cambria *Fayette Luzerne	Pittsburgh
18. Tennessee	Grundy Hamilton Marion Sequatchi	
19. Virginia	Lee Wise	
20. West Virginia	Logan *McDowell Mingo Wayne	
21. Wisconsin	Douglas Iron	
22. Washington	Grays Harbor	

Figure 1

PILOT FOOD STAMP PROGRAM

Impact on Retail Food Store Sales in Avoyelles Parish, La.

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BACKGROUND

In mid-1961, a Food Stamp Program was inaugurated by the U.S. Department of Agriculture on a pilot basis in eight economically depressed areas. Subsequently, the Pilot Program has been expanded. As of March 1964, it was operating in 40 counties and 3 cities in 22 States (fig. 1). During March 1964, more than 392,000 people participated in the Program. They were issued nearly $6.5 million worth of coupons of which about $2.6 million, or 40 percent, represented free food coupons.

The Program was initiated on a pilot basis to evaluate its effectiveness in expanding utilization of agriculture's abundant resources and to improve the nutritional intake of needy families by increasing their food purchasing ability. In the pilot areas, the Food Stamp Program replaced a phase of the existing Commodity Donation Program which applied to direct distribution of federally donated foods to needy families. But the Stamp Program did not affect food donations to schools or other nonprofit institutions serving needy people.

The U.S. Department of Agriculture administers the Food Stamp Program. State welfare and local government agencies certify the eligibility of applicants and issue coupons. Families participating in the Program buy coupons from local agencies. The cash they must invest generally equals the value they normally could be expected to spend for food. Then, they are issued extra coupons free of charge to permit them to buy food for a more nearly adequate diet. The difference between the cash paid by participants and the total value of coupons issued to them represents the Federal Government's contribution to the Program.

Participants use the coupons as cash to buy food at prevailing prices in retail food stores. Except for alcoholic beverages, tobacco products, coffee, tea, cocoa, bananas, and identifiable packaged imported food items, the coupons are valid for any food item in the retail store.

Previous research to evaluate the impact of the Program on retail food sales conducted in the eight original pilot areas showed that dollar sales in sample retail food stores averaged 8 percent higher during the first 3 months of the Program. Further surveys made in two of the areas after a year of operation showed gains in sales were being maintained.

Findings of earlier surveys also showed that value of food coupons redeemed represented around 6 percent of sales in sample stores. Size of store alone was not considered significant in attracting food coupon business. Detailed findings of previous studies, as well as descriptions of the Program, are in earlier reports. 1/

1/ Published reports describing and evaluating the Pilot Food Stamp Program are listed on page ii.

Information in this report is based on two surveys conducted during two 4-week periods in 1963 in 73 stores in Avoyelles Parish, La. The pre-Program period was January 21-February 16, and the Program period, June 24-July 20. Although the 73 stores represented only about half the number of stores in Avoyelles, the sample stores are estimated to account for close to 70 percent of total food sales for the Parish.

As in other test areas, sample stores in Avoyelles Parish furnished information weekly for total sales and sales by major food departments as well as customer count during both survey periods. In addition, during the Program period, each store reported the amount of food coupons redeemed weekly. Charge sales and money paid on accounts outstanding were computed on a current basis to provide current net sales during both survey periods.

DESCRIPTION OF TEST AREA

Avoyelles Parish is in the east-central part of Louisiana. According to the 1960 census, three-fourths of the Parish's 38,000 population live in rural areas. Farming is the major industry employing nearly 3,000 from a labor force of 10,761 in 1960.

General economic conditions in Avoyelles have been characterized by a substantial and persistent labor surplus. Monthly labor market letters for the Alexandria, La., labor market, a Tri-Parish area including Avoyelles, showed that during January-February of 1963 nearly 10 percent of the labor force was unemployed compared with less than 7 percent during June-July 1963, the Program period. 2/ In terms of numbers, there were 1,100 more employed in the Tri-Parish area during June-July than January-February. Of these additional employees, more than half were hired as farmworkers, mostly on a temporary or seasonal basis. The reports also showed that seasonal employment during 1963, particularly by agriculture, was measurably below the 1962 level.

The Commodity Donation Program, under which low-income households received federally donated foods, operated in Avoyelles Parish from April 1962 through February 1963. During the last month of its operation, the Federal Government donated approximately $47,700 worth of foods. This was about average for the Commodity Donation Program both in number of persons participating and cost of the foods distributed in the Parish.

The Food Stamp Program replaced the Commodity Donation Program in March 1963. The first 7 months that the Food Stamp Program operated, over 18 percent of the population in the Parish participated (table 1). Total value of coupons issued during this period was $572,841, of which $237,524 were purchased by the participating households. Value of free coupons totaled $334,887 for the 7 months, or a monthly average of $47,841. Because a relatively high proportion of participants in the area had little, if any, income, more than 58 percent of the coupons were issued free, which is more than the national average. Free coupons as a proportion of total coupons issued was highest during March--nearly 64 percent--but declined steadily to a low of about 53 percent by September. This decline reflected an increase in income and employment in the Parish during the summer months.

Participation in the Food Stamp Program in Avoyelles Parish was subject to a distinct seasonal variation, reflecting primarily changes in employment opportunities

2/ The labor-market reports issued in Alexandria, La., includes Rapides, Grant, and Avoyelles Parishes.

Table 1.--Number of persons participating in Food and Stamp Program, value of coupons issued, and proportion of coupons issued free, Avoyelles Parish, La., March-September 1963

Month	Participants		Amount recipients paid for coupons	Value of free coupons	Total value of coupons issued	Value of free coupons as percentage of total value
	Persons	Percentage of all residents 1/				
	Number	Percent	Dollars	Dollars	Dollars	Percent
March	6,894	18.1	28,200	49,805	78,005	63.8
April	8,002	21.1	33,573	57,213	90,786	63.0
May	7,637	20.1	34,553	54,167	88,720	61.1
June	6,706	17.6	34,822	45,298	80,120	56.5
July	6,608	17.4	35,137	44,253	79,390	55.7
August	6,563	17.3	35,621	43,612	79,233	55.0
September	6,230	16.4	35,619	40,536	76,155	53.2
Total	--	--	237,524	334,887	572,411	--
Average	6,949	18.3	33,932	47,841	81,773	58.5

1/ Represents the proportion of all residents participating, based on 38,000 as the total.

in agriculture. During the initial 7-month period, participation ranged from a high of over 8,000 in April to a low of about 6,200 in September. About 80 percent of the households participating in July were farm households, and included laborers, sharecroppers, farm owners, and tenant farmers. The remaining 20 percent represented all other occupations.

SEASONALITY OF SALES

To identify and quantify any seasonal influence on retail food sales in Avoyelles Parish, monthly gross sales of about two-thirds of the sample stores were compared during two 4-week periods, January and February and June and July of 1960-63. For the years 1960-62, gross sales of these stores averaged 8.2 percent higher during the June-July period. Moreover, the 1963 data showed that sales of nonfood items, such as hardware, soft goods, feed and fertilizers, and gas and oils, which many of the sample stores carried, were subject to a greater seasonal rise during June and July than food items, despite the increased purchasing power generated for food by the Food Stamp Program during that period. After excluding nonfood items from total sales, it was found that, because of seasonal influence, food sales were about 6.5 percent higher during June-July 1960-62 than in January-February. Thus, of the 13.5 percent sales increase in food sales recorded by sample stores in Avoyelles during the June-July 1963 test period, approximately half of this increase, or 6.5 percentage points, may be attributed to seasonal influence.

FOOD STAMP PROGRAM'S EFFECT ON SALES

Sales gains recorded by 73 retail food stores in Avoyelles Parish indicated that the Pilot Food Stamp Program had a significant and positive impact on food sales.

After adjustment for seasonal influence, sales in retail food stores were 7 percent higher than before the Program.

The Food Stamp Program appeared to have influenced meat sales more than other major food groups. Meat department sales, unadjusted for seasonality, were 25 percent higher in June-July than in January-February 1963. Sales of groceries, unadjusted, rose 12 percent, but produce sales declined almost 10 percent (table 2).

Table 2.--Value of sales of selected food groups in 73 sample stores, 4-week test periods before and after food coupons were issued, and percentage change between periods, Avoyelles Parish, La., 1963

Food group	January-February before coupons were introduced	June-July with coupons in use	Percentage change
	Dollars	Dollars	Percent
Meat	97,495.83	121,864.65	25.0
Produce	23,887.30	21,547.73	-9.8
Groceries 1/	312,633.35	349,250.73	11.7
Total	434,016.48	492,663.11	13.5

1/ In most instances groceries include dairy products, eggs, and in some stores, frozen foods.

Produce sales through retail food stores appeared to be highly seasonal. They declined significantly during the summer months when produce was readily available at roadside stands and from local producers and home gardens. Based on observations and comments from retailers, produce sales also benefited from the Program; however, the increase was not enough to offset the seasonal decline during June-July.

During the 4-week survey period in June-July 1963, the value of food coupons redeemed in sample stores totaled about $45,000, or approximately 9 percent of total retail food sales. All stores that were certified to participate redeemed coupons during all 4 weeks of the Program period. However, the level of redemptions varied widely among stores. In six sample stores coupon redemptions totaled less than 1 percent of sales, while in five others redemptions were over 40 percent.

Although, as a group, all sizes of stores showed sales gains, very small stores showed the largest percentage gain in sales while the Program was in effect. Small- and medium-sized stores also showed significant gains (table 3).

Sale gains appeared to be closely related to the percentage of food coupons redeemed. For example, when adjusted for seasonal influence, stores which had less than 3 percent of their sales volume from food coupons actually experienced a decline in sales during the Program period. On the other hand, stores which had a higher level of redemptions showed a significant plus in sales. In general, sales gains in sample food stores rose as the proportion of coupon redemption to total sales rose, although not at the same rate (table 4).

Stores in Avoyelles Parish made no formal promotional effort to attract holders of food coupons. Some retailers did encourage customers on an individual basis to

Table 3.--Value of sales in 73 sample retail food stores in Avoyelles Parish, La., 4-week test periods before and after food coupons were introduced, and percentage increase between periods, 1963

Size of store 1/	Number of stores	January-February before stamps were introduced	June-July with stamps in use		Percentage increase	
			Un-adjusted	Adjusted 3/	Un-adjusted	Adjusted 3/
		Dollars	Dollars	Dollars	Percent	Percent
Fairly large and medium 2/	18	278,357	311,894	293,801	12.0	5.5
Small	14	71,194	81,117	76,489	13.9	7.4
Very small	41	84,465	99,652	94,162	18.0	11.5
All sizes of stores	73	434,016	492,663	464,452	13.5	7.0

1/ Size classification of store by annual volume of business:
Fairly large.....$375,000 to $1 million
Medium.....$100,000 to $374,999
Small.....$50,000 to $99,999
Very small.....Under $50,000
2/ Fairly large- and medium-sized stores were combined to avoid identifying individual store's performance.
3/ Reflect adjustment for normal seasonal change.

Table 4.--Percentage change in sales from first to second 4-week test period, 73 sample food stores, by proportion of sales for food coupons, Avoyelles Parish, La., 1963

Percentage of total sales accounted for by food coupons, June-July 1/	Number of stores	Percentage change in total sales from January-February to June-July 2/
		Percent
Less than 3 percent	15	-3.9
3 to 10 percent	29	11.1
Over 10 percent	29	15.0
9.1 percent (all stores)	73	7.0

1/ Total sales were not adjusted for seasonal variation.
2/ Total sales were adjusted for seasonal variation.

apply for the Program benefits. For the most part, it appeared that participants did not change their shopping habits and continued to shop in the same stores they had shopped in before the Program became available. Thus, the wide variation in coupon redemptions and sales gains among sample stores reflected more of such factors as store location, previous shopping habits, and store patronage than type of store or store characteristics.

CHANGES IN SALES AT WHOLESALE LEVEL

A number of wholesale food establishments serving Avoyelles Parish furnished sales information for the two survey periods, January-February and June-July 1963. 3/

Of wholesale firms reporting, seasonally unadjusted meat sales increased 19 percent and bakery sales 32 percent from the January-February to June-July period, while dairy sales declined nearly 10 percent. The decline in dairy sales appeared to be seasonal. Federal Milk Order Market data for that part of Louisiana showed that for a 3-year period milk sales were nearly 17 percent less during June-July than January-February. Thus, dairy sales at the wholesale level declined less than the usual seasonal amount during June-July 1963 when the Food Stamp Program was in effect.

Sufficient wholesale data were not available for establishing seasonal sales patterns for meats and bakery products. However, data obtained from several of the meat and bakery firms serving Avoyelles Parish showed that sales were significantly greater during June-July 1963 than during January-February. Officials of the reporting firms indicated that, although sales were generally higher during the summer months, the increases recorded during June and July 1963 were greater than usual. Wholesalers generally attributed these above-normal increases to the Food Stamp Program.

Monthly sales data furnished by selected general-line grocery wholesalers for the period March-August 1960-63 showed marked stability from year to year. For example, during 1960-62, March-August sales varied less than 1 percent from the 3-year average for this period. However, during March-August 1963, the first 6 months of the Food Stamp Program, sales volume was more than 7 percent greater than the average for this period during the 3 preceding years. This is further evidence of the positive effect the Food Stamp Program has had on food sales in Avoyelles Parish.

PRICES OF SELECTED FOOD ITEMS

To obtain some indication of possible changes in general price levels of food in Avoyelles Parish during the survey and to adjust for its impact of sales in test stores, prices were observed for 15 selected food items at retail during both survey periods. Results showed that the unweighted composite price for the items observed was about 3 percent higher during the Program period than in the pre-Program period. 4/ However, more than half of this increase was due to the increase in price of one item, frozen concentrated orange juice. Except for dry beans and ground meat, other price increases were generally for items that constituted a small portion of the total food purchased by most consumers. Prices of basic foods, such as milk, potatoes, bread, butter, margarine, and poultry, were unchanged while the price of bananas was lower (table 5). Therefore, in terms of the typical food basket purchases in sample stores, if properly weighted, costs would have been almost the same during June-July 1963 as in January-February.

3/ Information was furnished by 7 wholesale meat firms, 3 bakeries, 3 dairies, and 4 general-line grocery wholesalers.

4/ No attempt was made to ascertain relative quantities of items purchased by consumers in determining the composite price. Items priced were not intended to be a representative sample of all food items offered in sample stores. However, it is felt that any significant change in the total retail food price level would have been reflected by the 15 items priced.

Table 5.--Prices of selected food items in 73 sample retail food stores, 4-week test periods before and after food coupons were issued, and percentage change from first to second test period, Avoyelles Parish, La., 1963

Item	Unit	Average prices 1/		Change
		January-February	June-July	
		Dollars	Dollars	Percent
Chicken (broiler, fryer)	Lb.	0.31	0.31	--
Hamburger	Lb.	.55	.56	1.8
Milk (fresh)	Qt.	.28	.28	--
Milk (dry)	Qt. equiv.	.09	.09	--
Butter	Lb.	.90	.90	--
Margarine	Lb.	.26	.26	--
Bread	1-lb. loaf	.29	.29	--
Potatoes	Lb.	.06	.06	--
Lettuce	Head	.23	.25	8.7
Bananas	Lb.	.16	.15	-6.2
Cake mix	Box	.34	.36	5.9
Flour (self-rising)	Lb.	.10	.11	10.0
Beans (dry)	Lb.	.16	.17	6.2
Frozen orange juice	6 oz.	.28	.36	28.6
Ice cream	½ gal.	.76	.77	1.3
Total	--	.32	.33	3.3

1/ Rounded to nearest cent.