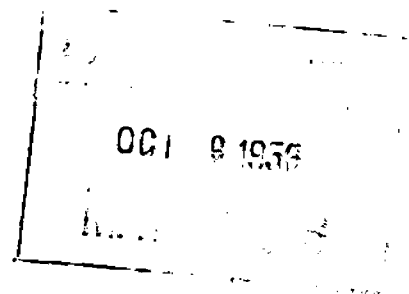


**HIGHWAY RESEARCH BOARD**

**Special Report 11-C**



***Parking and Buying Habits  
Of a Store's Customers***

**National Academy of Sciences—**

**National Research Council**

*publication 273c*

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The opinions and conclusions expressed in this publication are those of the authors  
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**HIGHWAY RESEARCH BOARD**

**Special Report 11-C**

***Parking and Buying Habits  
Of a Store's Customers***

***A SUPPLEMENT TO SPECIAL REPORT 11  
"PARKING AS A FACTOR IN BUSINESS"***

**PRESENTED AT THE  
Thirty-Fifth Annual Meeting  
January 17-20, 1956**

**1956  
Washington, D. C.**

# Study of Parking and Its Relationships to Business

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## Preface

Much has been said about parking as a factor in business. It is often asserted that shifts in retailing activities and land values are the direct result of insufficient parking. By the same token, it is said that availability of ample parking facilities is a major asset to business. However, in the past there has been little fundamental research in this field to evaluate the real impact of parking on business operations.

In recognition of the lack of such information, the automotive and petroleum industries made funds available to the Automotive Safety Foundation for such research. The Highway Research Board was requested to direct this work. The Board in turn established an advisory committee representing business, property owners, government, and transportation to provide practical guidance and counsel to the project. To expedite the program, a project engineer was loaned by the Bureau of Public Roads.

The initial phases of the research involved analyses of attitudes of shoppers and merchants, changes in property values, shifts in retail activities, and trends in urban transportation. These findings were reported in detail in *Special Report 11: Parking as a Factor in Business*. Since then additional studies have been made on the habits and attitudes of shoppers, the travel pattern to shopping areas, and the effect of customer parking facilities on shopping habits.

The present report pertains to the findings of research done in connection with shoppers' parking habits in Lexington, Kentucky, and the effects of parking availability on their buying habits. Included in the surveys are both nearby and immediately adjacent parking facilities, with the added factor of free as against paid parking.

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# Comparative Study of Parking and Buying Habits of A Department Store's Customers

LAURENCE C. PENDLEY, *Assistant Professor Civil Engineering Department, University of Kentucky*

● SINCE 1951, the Highway Research Board has been directing research by various university agencies into the effect of parking upon business. The results of several phases of this study have been published in Special Reports 11, 11-A, and 11-B. In connection with this study, it was learned early in 1954 that one of the largest department stores in Lexington, Kentucky, was planning to open a parking lot just across the street from their store. This fact suggested that surveys might be made before and after opening of this lot to determine what effect, if any, the addition of such a facility would have on the business of this store as reflected in the travel, parking, and buying habits of its customers.

## OBJECTIVES

This study was then undertaken by the author as a project of the Civil Engineering Department and the Kentucky Research Foundation, agencies of the University of Kentucky. This report presents the results of both the before and after studies. In each study the object was to determine: (1) where the store's shoppers were coming from, (2) the mode of travel they were using, (3) where the shoppers who drove their automobiles were parking, and (4) what and how much the customers were buying.

## SURVEY PERIODS

The first survey was made June 9 through June 26, 1954, giving a total of 13 weekdays and 3 Saturdays. This was about 3 weeks before the parking lot was opened to the public. The final study took place approximately one year later, from June 9 to June 15, 1955, inclusive. Although the 1955 study was shorter, the results in 1954 indicated that by proper selection of the period to be studied, satisfactory results could be obtained with a shorter period of survey. This period was also chosen to minimize the effects of seasonal variation upon the purchase of the various types of commodities as well as to allow time for the use of the parking lot to become a part of the habits of the store's shoppers.

## BACKGROUND CONDITIONS

The survey store is family-owned and operated. It is located in the center of a block near the outer edge of the central downtown area of Lexington. The store has approximately 61,000 sq. ft. of floor space devoted to merchandising. The two principal competitors of this store in the same quality range of general merchandise apparel and furnishings have floor areas of slightly less than 60,000 sq. ft.

The parking lot, like the store, is located in the center of the block and is so arranged as to allow entrance and exit from two streets. Attendant parking is used and the lot is considered to have a capacity of 100 cars. Standard rates are charged and no free parking is provided for the store's customers. However, some banks and other businesses do have ticket validating arrangements for their clients.

At the time of the 1954 survey the nearest off-street parking facilities consisted of one commercial garage (known in this report as Garage A) with a capacity of 140 cars and a small lot holding approximately 40 cars. Each of these facilities is about 300 feet walking distance from a rear entrance to the store. In June 1954, the store was providing two hours free parking for their customers at the garage, and had in times past emphasized in advertising that free parking was available within 300 feet of the store. The addition of the parking lot across from the store represents the only change of any size in the number of parking spaces available within two or three blocks of the store in any direction, within the period covered by both surveys (see Figure 1).

Lexington is a city with a 1950 population of 55,534. There is, however, a heavily populated suburban ring around most of the city, and Fayette County, including Lexington and environs, had a 1950 population of 100,746. Best estimates of the population of this metropolitan area in June 1954 were around 112,000 and in June 1955 it is estimated that the population of the same area had risen to approximately 118,000.

In 1952, the City of Lexington, the Bureau of Public Roads, and the Kentucky Department of



Highways cooperated to make a Parking Survey of Lexington. In connection with this study, several facts were brought out which are of interest. The

survey showed that there were available in the two blocks where the store and the parking lot are located, 287 space-hours of on-street parking

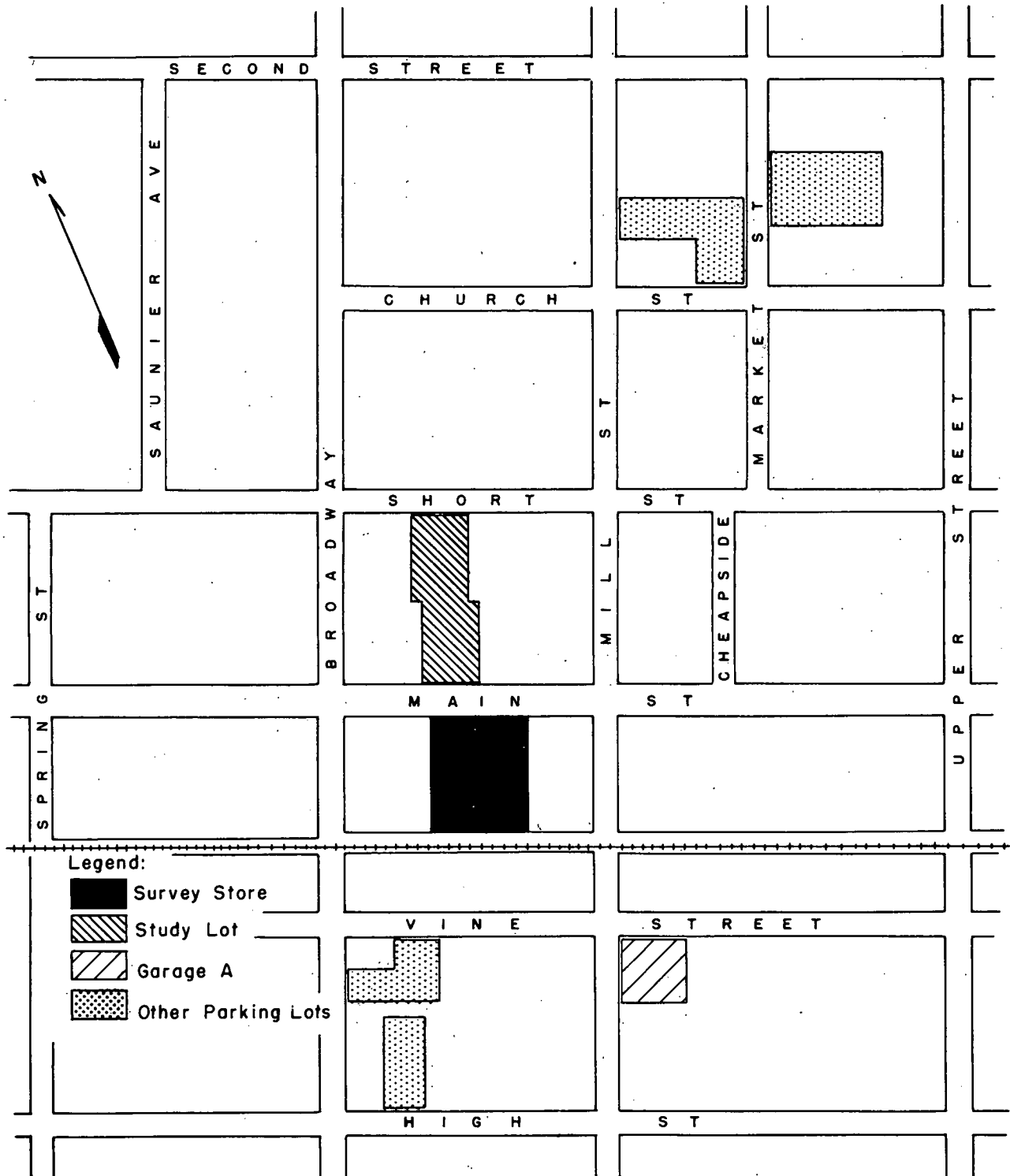


Figure 1. Map showing west end of Lexington, Ky. business section.

for an 8-hour day and that the demand was 1,431 space-hours. This leaves a deficiency of 1,144 space-hours. It was also shown that the survey store was the principal generator of demand for parking space in the two-block area with a demand of 446 space-hours for an 8-hour day, more than twice as much as its nearest competitor. Thus, it can be seen that the survey store accounts for 31.2 percent of all the demand in the area or enough to use all of the available space-hours as well as 13.9 percent of the deficiency.

### INTERVIEW PROCEDURE

The store's shoppers were interviewed at all four entrances to the store. Of these four doors, one enters into a store-owned cafeteria and is open only from 11 a.m. to 2 p.m. daily, while another door opens into a service street along the railroad at the rear of the store.

The questionnaire forms used in both surveys are shown in Appendix A. Each year, questions not directly concerned with the parking habits of the store's customers were asked in order to obtain certain information for the store owners. The results of most of these tabulations are shown in Appendix B, but others, of more general interest, are shown in the body of the report.

Door counts were made at each entrance to determine the number of shoppers using the various doors. In this report, the term "shopper" is used to include all persons exclusive of staff and visiting salesmen; the term "customer" is used to designate only those shoppers who made a purchase.

As previously mentioned, in 1954 the store was giving two hours free parking at Garage A and it was expected that the store would adopt some similar plan at the lot when it was opened. The store, however, decided to operate the parking lot as a separate business. Since its opening it has made no public mention of its interest in the lot and has offered no free parking at the lot for its customers. In addition, early in 1955 the store terminated its free parking arrangement with the garage. At the time of the 1955 survey, there was no free parking available to store customers at any off-street facility.

During the period of the 1955 survey, customers at the parking lot were also interviewed. The questionnaire form is shown in Appendix A and tables showing the results obtained in this study are in Appendix C. In this study the objectives

were to find where the lot's customers were coming from, where they were shopping, and how much they were buying.

### RESULTS

Some of the more important tabulations of the data obtained at the store for both years of the survey are presented in the following tables. In each case the weekday and Saturday figures are averages for the days covered in the surveys.

TABLE 1  
SEX AND RACE OF SHOPPERS

|                | Weekday |         | Saturday |         |
|----------------|---------|---------|----------|---------|
|                | 1954    | 1955    | 1954     | 1955    |
|                | percent | percent | percent  | percent |
| Female White   | 86.4    | 82.4    | 79.1     | 76.0    |
| Female Colored | 6.2     | 4.8     | 9.0      | 8.5     |
| Male White     | 6.8     | 11.6    | 11.2     | 14.1    |
| Male Colored   | 0.6     | 1.2     | 0.7      | 1.4     |
| Total          | 100.0   | 100.0   | 100.0    | 100.0   |

Table 1 reveals a slight shift toward relatively more male shoppers. This could have been due to the weather which was less favorable for farm work in 1955 than in 1954.

TABLE 2  
ORIGIN OF ALL SHOPPING TRIPS

|       | Weekday |         | Saturday |         |
|-------|---------|---------|----------|---------|
|       | 1954    | 1955    | 1954     | 1955    |
|       | percent | percent | percent  | percent |
| Home  | 86.2    | 76.6    | 93.4     | 85.5    |
| Work  | 11.7    | 15.6    | 5.6      | 8.4     |
| Other | 2.1     | 7.8     | 1.0      | 6.1     |
| Total | 100.0   | 100.0   | 100.0    | 100.0   |

A greater percentage of people coming to shop from work and from other points of origin is shown in Table 2. The presence of the new parking lot in 1955 might possibly be responsible for this trend but it is not too plausible a reason.

TABLE 3  
DISTRIBUTION OF SHOPPERS BY HOUR LEAVING STORE

| Hour  | Weekday |         | Saturday |         |
|-------|---------|---------|----------|---------|
|       | 1954    | 1955    | 1954     | 1955    |
|       | percent | percent | percent  | percent |
| 9-10  | 5.1     | 3.1     | 5.6      | 4.4     |
| 10-11 | 9.5     | 8.3     | 11.1     | 10.5    |
| 11-12 | 13.7    | 12.6    | 15.2     | 14.7    |
| 12-1  | 17.4    | 18.2    | 15.8     | 15.7    |
| 1-2   | 16.0    | 16.5    | 13.7     | 14.7    |
| 2-3   | 14.0    | 15.4    | 13.3     | 13.1    |
| 3-4   | 12.8    | 14.3    | 12.5     | 13.6    |
| 4-5   | 11.5    | 11.6    | 12.8     | 13.3    |
| Total | 100.0   | 100.0   | 100.0    | 100.0   |

Table 3 shows that there was no significant change in the hourly distribution of shoppers leaving the store between the period of the two studies.

TABLE 4

RELATIONSHIP OF MODE OF TRAVEL TO LENGTH OF TIME SPENT IN STORE ON WEEKDAY (1954)

| Time in Store | Auto    | City Bus | Inter-City Bus | Taxi    | Walk    | Other   | Percent of Day's Total Shoppers |
|---------------|---------|----------|----------------|---------|---------|---------|---------------------------------|
|               | percent | percent  | percent        | percent | percent | percent | percent                         |
| 0-5 min.      | 9.8     | 10.2     | 5.7            | 16.7    | 15.4    | 11.1    | 10.4                            |
| 5-15 min.     | 35.6    | 42.1     | 45.6           | 33.3    | 50.6    | 33.3    | 39.0                            |
| 15-30 min.    | 35.5    | 34.4     | 28.6           | 16.7    | 27.4    | 44.5    | 34.5                            |
| 30-45 min.    | 4.6     | 3.8      | 2.9            | 16.6    | 3.5     | 0.0     | 4.4                             |
| 45-60 min.    | 10.4    | 7.6      | 11.4           | 0.0     | 1.9     | 11.1    | 8.5                             |
| 1-4 hours     | 4.1     | 1.9      | 5.8            | 16.7    | 1.2     | 0.0     | 3.2                             |
| Total         | 100.0   | 100.0    | 100.0          | 100.0   | 100.0   | 100.0   | 100.0                           |

TABLE 5

RELATIONSHIP OF MODE OF TRAVEL TO LENGTH OF TIME SPENT IN STORE ON SATURDAY (1954)

| Time in Store | Auto    | City Bus | Inter-City Bus | Taxi    | Walk    | Other   | Percent of Day's Total Shoppers |
|---------------|---------|----------|----------------|---------|---------|---------|---------------------------------|
|               | percent | percent  | percent        | percent | percent | percent | percent                         |
| 0-5 min.      | 8.9     | 11.1     | 10.0           | 33.3    | 20.7    | 15.4    | 11.4                            |
| 5-15 min.     | 38.8    | 36.3     | 31.4           | 66.7    | 45.1    | 46.1    | 37.7                            |
| 15-30 min.    | 35.4    | 36.6     | 54.3           | 0.0     | 25.9    | 38.5    | 35.8                            |
| 30-45 min.    | 4.6     | 2.9      | 2.9            | 0.0     | 3.0     | 0.0     | 4.1                             |
| 45-60 min.    | 7.1     | 9.5      | 1.4            | 0.0     | 3.4     | 0.0     | 7.3                             |
| 1-4 hours     | 5.2     | 3.6      | 0.0            | 0.0     | 1.9     | 0.0     | 3.8                             |
| Total         | 100.0   | 100.0    | 100.0          | 100.0   | 100.0   | 100.0   | 100.0                           |

Tables 4 and 5 are from studies made primarily at the request of the store management, but it was unfortunate that time and other considerations made it impossible to repeat them in 1955. It would appear from these tables that, for this store at least, there would be little or no point to giving over one-hour free parking, since approximately 96 percent of all shoppers are out of the store in less than an hour. However, it should be pointed out that these times are estimates of the shoppers themselves.

TABLE 6

TRIPS PER THOUSAND POPULATION AS RELATED TO DISTANCE TRAVELED ON WEEKDAY (1954)

| Area                          | Est. Pop. June 1954 | Average Distance from Store (Miles) | Auto Drivers            |                        | Auto Drivers and Passengers |                        | All Modes of Travel     |                        | Percent Customers |
|-------------------------------|---------------------|-------------------------------------|-------------------------|------------------------|-----------------------------|------------------------|-------------------------|------------------------|-------------------|
|                               |                     |                                     | Customers per 1000 Pop. | Shoppers per 1000 Pop. | Customers per 1000 Pop.     | Shoppers per 1000 Pop. | Customers per 1000 Pop. | Shoppers per 1000 Pop. |                   |
| Fayette County                |                     |                                     |                         |                        |                             |                        |                         |                        |                   |
| Zone 000                      | 5,631               | 0.37                                | 0.76                    | 1.56                   | 1.09                        | 2.02                   | 6.28                    | 14.71                  | 42.6              |
| Ring 1                        | 48,619              | 0.93                                | 1.77                    | 3.03                   | 2.50                        | 4.21                   | 7.90                    | 12.84                  | 61.5              |
| Ring 2                        | 34,730              | 1.88                                | 5.34                    | 8.45                   | 6.74                        | 10.84                  | 11.19                   | 19.66                  | 57.2              |
| Ring 3                        | 18,357              | 5.17                                | 3.10                    | 4.85                   | 3.95                        | 6.45                   | 4.81                    | 8.13                   | 59.0              |
| Ring 4                        | 4,985               | 9.34                                | 2.69                    | 4.96                   | 3.83                        | 7.60                   | 4.06                    | 8.29                   | 48.9              |
| Adjoining and Nearby Counties |                     |                                     |                         |                        |                             |                        |                         |                        |                   |
| 2 Counties                    | 23,670              | 13                                  | 2.03                    | 3.75                   | 2.43                        | 4.70                   | 2.76                    | 5.37                   | 51.3              |
| 8 Counties                    | 146,266             | 17-32                               | 0.62                    | 1.21                   | 0.70                        | 1.38                   | 0.82                    | 1.65                   | 49.7              |

TABLE 7

TRIPS PER THOUSAND POPULATION AS RELATED TO DISTANCE TRAVELED ON SATURDAY (1954)

| Area                          | Est. Pop. June 1954 | Average Distance from Store (Miles) | Auto Drivers            |                        | Auto Drivers and Passengers |                        | All Modes of Travel     |                        | Percent Customers |
|-------------------------------|---------------------|-------------------------------------|-------------------------|------------------------|-----------------------------|------------------------|-------------------------|------------------------|-------------------|
|                               |                     |                                     | Customers per 1000 Pop. | Shoppers per 1000 Pop. | Customers per 1000 Pop.     | Shoppers per 1000 Pop. | Customers per 1000 Pop. | Shoppers per 1000 Pop. |                   |
| Fayette County                |                     |                                     |                         |                        |                             |                        |                         |                        |                   |
| Zone 000                      | 5,631               | 0.37                                | 0.63                    | 1.35                   | 0.94                        | 2.06                   | 9.74                    | 18.29                  | 53.2              |
| Ring 1                        | 48,619              | 0.93                                | 2.56                    | 4.21                   | 3.79                        | 5.98                   | 9.31                    | 16.58                  | 56.1              |
| Ring 2                        | 34,730              | 1.88                                | 6.79                    | 10.91                  | 8.92                        | 14.66                  | 13.45                   | 22.50                  | 59.8              |
| Ring 3                        | 18,357              | 5.17                                | 4.76                    | 7.85                   | 7.10                        | 11.92                  | 8.11                    | 13.73                  | 58.3              |
| Ring 4                        | 4,985               | 9.34                                | 4.86                    | 8.81                   | 5.64                        | 13.22                  | 5.87                    | 14.35                  | 40.9              |
| Adjoining and Nearby Counties |                     |                                     |                         |                        |                             |                        |                         |                        |                   |
| 2 Counties                    | 23,670              | 13                                  | 2.21                    | 4.81                   | 2.67                        | 5.85                   | 3.03                    | 6.41                   | 47.2              |
| 8 Counties                    | 146,266             | 17-32                               | 0.65                    | 1.40                   | 0.83                        | 1.70                   | 1.02                    | 2.03                   | 50.2              |

TABLE 8

TRIPS PER THOUSAND POPULATION AS RELATED TO DISTANCE TRAVELED ON WEEKDAY (1955)

| Area                          | Est. Pop. June 1955 | Average Distance from Store (Miles) | Auto Drivers            |                        | Auto Drivers and Passengers |                        | All Modes of Travel     |                        | Percent Customers |
|-------------------------------|---------------------|-------------------------------------|-------------------------|------------------------|-----------------------------|------------------------|-------------------------|------------------------|-------------------|
|                               |                     |                                     | Customers per 1000 Pop. | Shoppers per 1000 Pop. | Customers per 1000 Pop.     | Shoppers per 1000 Pop. | Customers per 1000 Pop. | Shoppers per 1000 Pop. |                   |
| Fayette County                |                     |                                     |                         |                        |                             |                        |                         |                        |                   |
| Zone 000                      | 5,631               | 0.37                                | 0                       | 0.71                   | 0.37                        | 1.54                   | 6.05                    | 12.58                  | 48.1              |
| Ring 1                        | 49,119              | 0.93                                | 0.98                    | 2.30                   | 1.61                        | 4.10                   | 4.71                    | 11.92                  | 39.5              |
| Ring 2                        | 36,308              | 1.88                                | 2.76                    | 5.60                   | 4.80                        | 9.33                   | 8.42                    | 17.62                  | 47.8              |
| Ring 3                        | 21,851              | 5.17                                | 1.47                    | 3.03                   | 2.55                        | 5.90                   | 3.13                    | 7.43                   | 42.1              |
| Ring 4                        | 5,085               | 9.34                                | 1.59                    | 4.77                   | 2.46                        | 7.99                   | 3.28                    | 10.44                  | 31.4              |
| Adjoining and Nearby Counties |                     |                                     |                         |                        |                             |                        |                         |                        |                   |
| 2 Counties                    | 23,670              | 13                                  | 1.29                    | 3.03                   | 2.58                        | 5.98                   | 2.99                    | 6.71                   | 44.6              |
| 8 Counties                    | 146,266             | 17-32                               | 0.39                    | 0.99                   | 0.71                        | 1.83                   | 0.77                    | 2.07                   | 37.2              |

TABLE 9

TRIPS PER THOUSAND POPULATION AS RELATED TO DISTANCE TRAVELED ON SATURDAY (1955)

| Area                          | Est. Pop. June 1955 | Average Distance from Store (Miles) | Auto Drivers            |                        | Auto Drivers and Passengers |                        | All Modes of Travel     |                        | Percent Customers |
|-------------------------------|---------------------|-------------------------------------|-------------------------|------------------------|-----------------------------|------------------------|-------------------------|------------------------|-------------------|
|                               |                     |                                     | Customers per 1000 Pop. | Shoppers per 1000 Pop. | Customers per 1000 Pop.     | Shoppers per 1000 Pop. | Customers per 1000 Pop. | Shoppers per 1000 Pop. |                   |
| Fayette County                |                     |                                     |                         |                        |                             |                        |                         |                        |                   |
| Zone 000                      | 5,631               | 0.37                                | 0                       | 0                      | 0                           | 0                      | 1.97                    | 3.46                   | 56.9              |
| Ring 1                        | 49,119              | 0.93                                | 1.39                    | 3.53                   | 3.17                        | 8.03                   | 7.55                    | 17.44                  | 43.3              |
| Ring 2                        | 36,308              | 1.88                                | 4.72                    | 7.52                   | 8.75                        | 14.44                  | 12.67                   | 22.51                  | 56.3              |
| Ring 3                        | 21,851              | 5.17                                | 1.99                    | 5.96                   | 3.63                        | 11.10                  | 4.61                    | 12.61                  | 36.6              |
| Ring 4                        | 5,085               | 9.34                                | 0                       | 6.31                   | 6.02                        | 14.59                  | 6.02                    | 16.81                  | 35.8              |
| Adjoining and Nearby Counties |                     |                                     |                         |                        |                             |                        |                         |                        |                   |
| 2 Counties                    | 23,670              | 13                                  | 0.90                    | 2.70                   | 2.03                        | 7.15                   | 2.03                    | 7.15                   | 28.4              |
| 8 Counties                    | 146,266             | 17-32                               | 0.48                    | 1.33                   | 0.87                        | 2.80                   | 0.87                    | 3.03                   | 28.7              |

# DEPARTMENT STORE SURVEY

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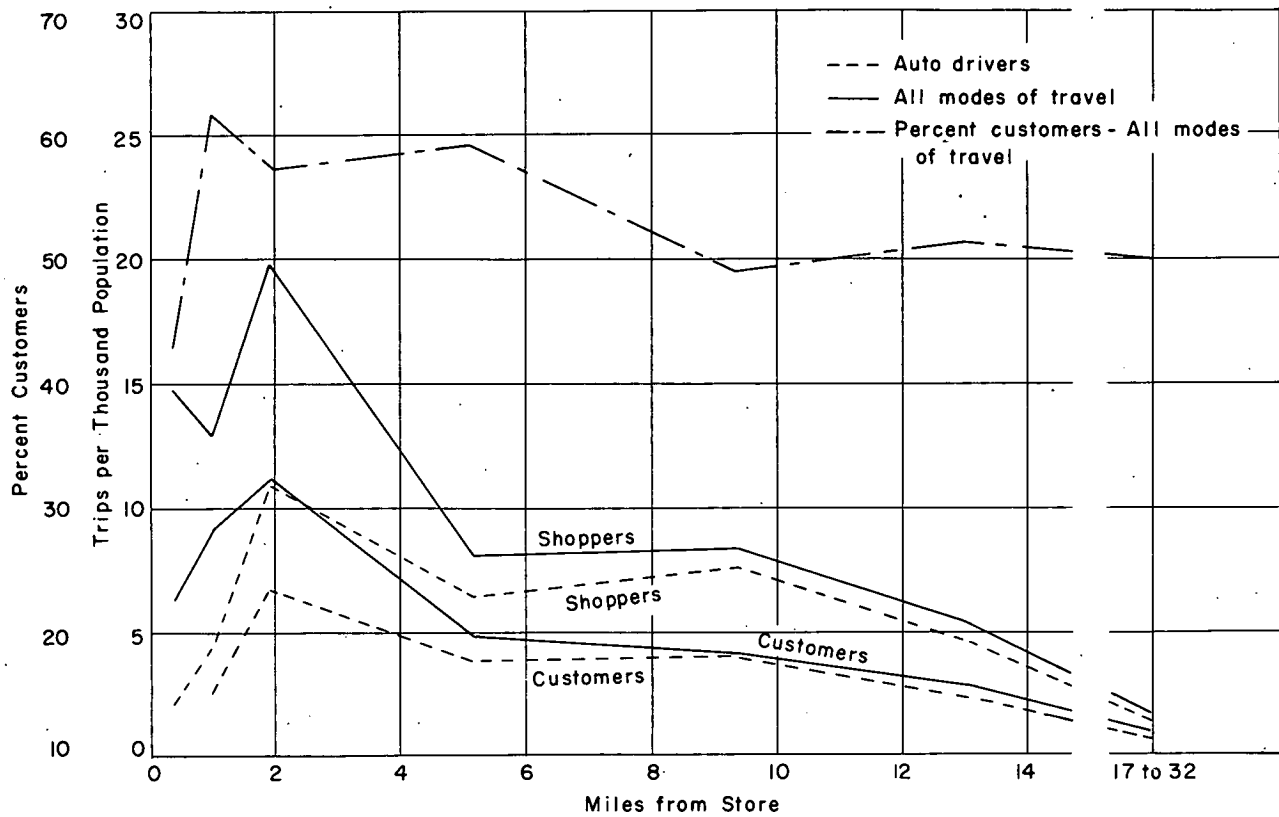


Figure 2. Number of trips versus distance traveled on weekday 1954.

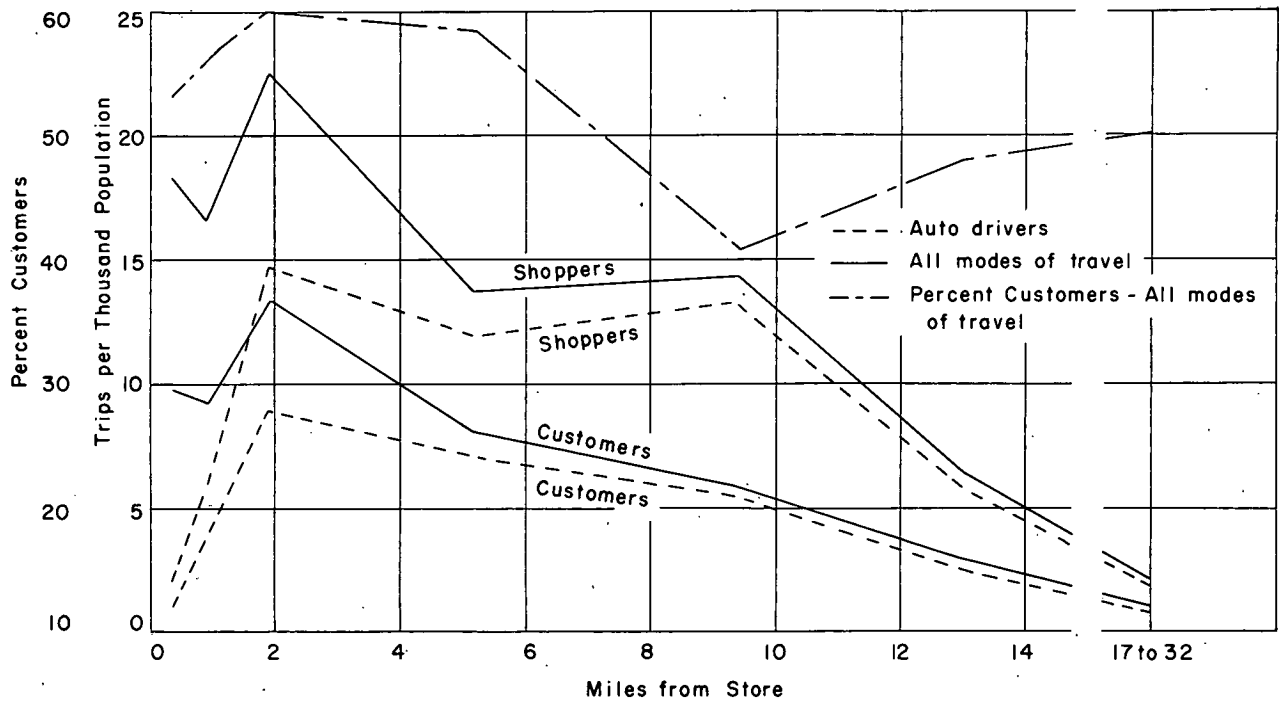


Figure 3. Number of trips versus distance traveled on Saturday 1954.

## PARKING AND BUYING HABITS

Tables 6 through 10 are designed to show where the store's customers and shoppers came from and by what mode of travel, in 1954 and 1955. Figures 2, 3, 4, and 5, are taken from Tables 6 through 9 respectively. These tables and figures show no widespread changes in the number of trips per thousand for the various zones and counties in

1955 as compared with 1954. It is interesting to note, however, that in 1955 the percentage of shoppers making purchases dropped below that of 1954 for all areas outside of the zone immediately surrounding the store, for both weekdays and Saturdays. Table 10 would indicate that, for some reason, the store apparently drew slightly

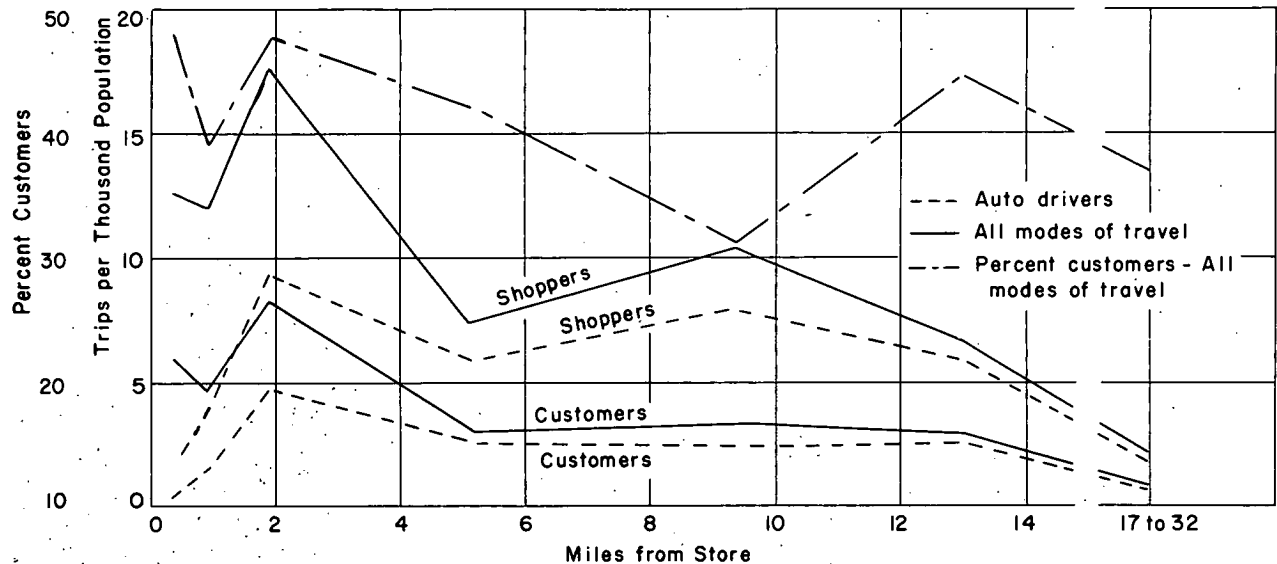


Figure 4. Number of trips versus distance traveled on weekday 1955.

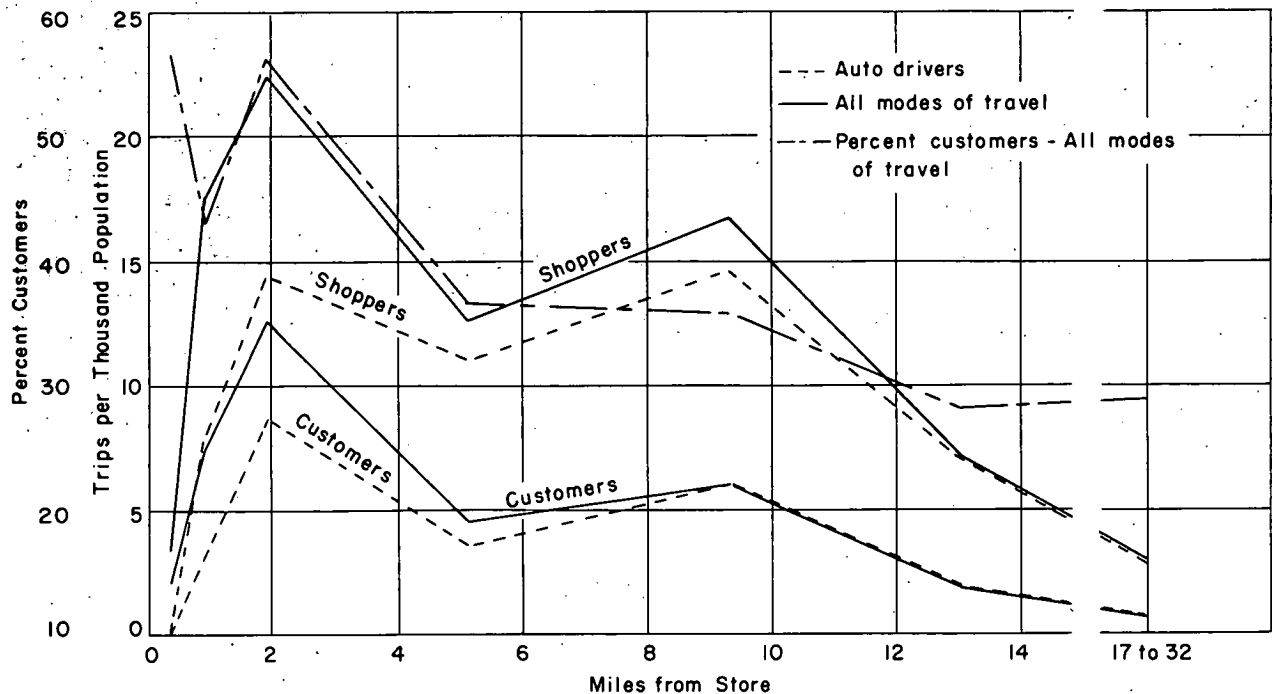


Figure 5. Number of trips versus distance traveled on Saturday 1955.

more shoppers from areas outside Fayette County and its ten nearby counties in 1955 than in 1954,

TABLE 10  
GEOGRAPHICAL ORIGIN OF STORE'S CUSTOMERS  
AND SHOPPERS

| Origin              | Weekday        |              |                |              | Saturday       |              |                |              |
|---------------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|
|                     | 1954           |              | 1955           |              | 1954           |              | 1955           |              |
|                     | Customers Only | All Shoppers | Customers Only | All Shoppers | Customers Only | All Shoppers | Customers Only | All Shoppers |
|                     | pct.           | pct.         | pct.           | pct.         | pct.           | pct.         | pct.           | pct.         |
| Fayette County      | 76.8           | 75.2         | 68.8           | 66.0         | 80.1           | 76.5         | 78.8           | 69.2         |
| Ten Nearby Counties | 16.0           | 16.8         | 20.0           | 20.1         | 15.4           | 17.0         | 13.0           | 19.2         |
| Total               | 92.8           | 92.0         | 88.0           | 86.1         | 95.5           | 93.5         | 91.8           | 88.4         |

on both weekdays and Saturdays. Apparently, the geographical origin of the store's customers is moving outward from the store.

TABLE 11  
MODE OF TRAVEL AND PERCENTAGE OF SHOPPERS  
MAKING PURCHASES

| Mode of Travel | Shoppers |       |          |       | Percent Making Purchases |      |          |      |
|----------------|----------|-------|----------|-------|--------------------------|------|----------|------|
|                | Weekday  |       | Saturday |       | Weekday                  |      | Saturday |      |
|                | 1954     | 1955  | 1954     | 1955  | 1954                     | 1955 | 1954     | 1955 |
|                | pct.     | pct.  | pct.     | pct.  | pct.                     | pct. | pct.     | pct. |
| Auto           | 57.6     | 60.4  | 61.7     | 66.4  | 56.6                     | 42.5 | 54.8     | 39.4 |
| City Bus       | 27.7     | 19.4  | 25.0     | 17.6  | 50.4                     | 40.0 | 55.0     | 42.6 |
| Inter-City Bus | 1.7      | 2.0   | 2.6      | 1.8   | 43.9                     | 36.3 | 58.1     | 0    |
| Taxi           | 0.3      | 0.1   | 0.1      | 0     | 76.9                     | 100  | 100      | —    |
| Walk           | 12.3     | 17.7  | 10.1     | 14.2  | 41.9                     | 39.6 | 52.0     | 57.3 |
| Other          | 0.4      | 0.4   | 0.5      | 0     | 37.9                     | 78.1 | 35.1     | —    |
| Total          | 100.0    | 100.0 | 100.0    | 100.0 |                          |      |          |      |

Table 11 brings out the fact that more of the store's shoppers are traveling via automobile or are walking to the store, while less are using public transit. It also reveals one of the symptoms indicating that the store is having difficulty maintaining its volume of sales. This is evident when it is noted that the percentage of customers was less in 1955 than in 1954 for those modes of travel which account for over five-sixths of the store's shoppers.

TABLE 12  
MODE OF TRAVEL RELATED TO STORE'S SALES

| Mode of Travel | Percent of Shoppers |       |                  |       | Percent of Store's Sales |       |                  |       |
|----------------|---------------------|-------|------------------|-------|--------------------------|-------|------------------|-------|
|                | Average Weekday     |       | Average Saturday |       | Average Weekday          |       | Average Saturday |       |
|                | 1954                | 1955  | 1954             | 1955  | 1954                     | 1955  | 1954             | 1955  |
| Auto           | 57.6                | 60.4  | 61.7             | 66.4  | 67.6                     | 65.9  | 72.3             | 67.6  |
| City Bus       | 27.7                | 19.4  | 25.0             | 17.6  | 22.5                     | 14.5  | 17.7             | 17.8  |
| Inter-City Bus | 1.7                 | 2.0   | 2.6              | 1.8   | 1.4                      | 3.4   | 1.1              | 0     |
| Taxi           | 0.3                 | 0.1   | 0.1              | 0     | 0.5                      | 0.1   | 0.2              | —     |
| Walk           | 12.3                | 17.7  | 10.1             | 14.2  | 7.7                      | 15.2  | 8.6              | 14.6  |
| Other          | 0.4                 | 0.4   | 0.5              | 0     | 0.3                      | 0.9   | 0.1              | —     |
| Total          | 100.0               | 100.0 | 100.0            | 100.0 | 100.0                    | 100.0 | 100.0            | 100.0 |

From the standpoint of the survey store, persons traveling by automobile are the best custom-

ers. Table 12 shows that they account for more than their share of sales based upon number of customers, although the ratio showed a decline for 1955 compared with 1954.

TABLE 13  
RELATIONSHIP OF PERCENTAGE OF CUSTOMERS AND SHOPPERS  
TRAVELING BY AUTO TO DISTANCE TRAVELED ON WEEKDAY

| Area                          | Average Distance from Store | Customers |         | Shoppers |         |
|-------------------------------|-----------------------------|-----------|---------|----------|---------|
|                               |                             | 1954      | 1955    | 1954     | 1955    |
|                               | miles                       | percent   | percent | percent  | percent |
| Fayette County                |                             |           |         |          |         |
| Zone 000                      | 0.37                        | 17.3      | 6.1     | 13.7     | 6.4     |
| Ring 1                        | 0.93                        | 37.8      | 33.3    | 32.8     | 34.4    |
| Ring 2                        | 1.88                        | 60.2      | 57.1    | 55.1     | 53.0    |
| Ring 3                        | 5.17                        | 82.0      | 81.3    | 79.3     | 79.3    |
| Ring 4                        | 9.34                        | 94.3      | 74.7    | 91.6     | 76.6    |
| Adjoining and Nearby Counties |                             |           |         |          |         |
| 2 Counties                    | 13                          | 89.0      | 86.3    | 88.0     | 89.1    |
| 8 Counties                    | 17-32                       | 90.5      | 92.6    | 89.1     | 88.8    |

TABLE 14  
RELATIONSHIP OF PERCENTAGE OF CUSTOMERS AND SHOPPERS  
TRAVELING BY AUTO TO DISTANCE TRAVELED ON SATURDAY

| Area                          | Average Distance from Store | Customers |         | Shoppers |         |
|-------------------------------|-----------------------------|-----------|---------|----------|---------|
|                               |                             | 1954      | 1955    | 1954     | 1955    |
|                               | miles                       | percent   | percent | percent  | percent |
| Fayette County                |                             |           |         |          |         |
| Zone 000                      | 0.37                        | 9.7       | 0       | 11.2     | 0       |
| Ring 1                        | 0.93                        | 40.7      | 42.0    | 36.0     | 46.0    |
| Ring 2                        | 1.88                        | 66.3      | 69.0    | 65.2     | 64.1    |
| Ring 3                        | 5.17                        | 87.5      | 78.8    | 86.7     | 87.9    |
| Ring 4                        | 9.34                        | 96.0      | 100.0   | 92.1     | 86.7    |
| Adjoining and Nearby Counties |                             |           |         |          |         |
| 2 Counties                    | 13                          | 87.8      | 100.0   | 90.3     | 100.0   |
| 8 Counties                    | 17-32                       | 80.8      | 100.0   | 84.1     | 92.3    |

Tables 13 and 14 indicate customers and shoppers hold to about the same geographical pattern so far as percentage of those traveling by automobile is concerned. There was some increase in the proportion of auto travelers on Saturday, among those living beyond Fayette County. But on weekdays a smaller percentage of Fayette customers and shoppers traveled by auto.

TABLE 15  
PARKING FACILITY USED BY DRIVER SHOPPERS

| Place of Parking | Weekday |         | Saturday |         |
|------------------|---------|---------|----------|---------|
|                  | 1954    | 1955    | 1954     | 1955    |
|                  | percent | percent | percent  | percent |
| Curb             | 43.7    | 39.6    | 45.9     | 41.2    |
| New Lot          | —       | 13.6    | —        | 14.9    |
| Other Lots       | 19.4    | 26.3    | 20.9     | 20.5    |
| Garage A         | 19.4    | 6.5     | 17.6     | 6.5     |
| Other Garages    | 15.2    | 12.6    | 13.1     | 15.8    |
| Other Places     | 2.3     | 1.4     | 2.5      | 1.1     |
| Total            | 100.0   | 100.0   | 100.0    | 100.0   |

Table 15 shows that curb parking and parking at Garage A both decreased in 1955, with the decrease apparently being absorbed by the new lot. In other words, as far as driver shoppers are concerned, lot parking gained at the expense of parking both at the curb and at Garage A.

In 1955, shoppers who rode with someone also were asked where the car was parked. Parking distribution of drivers and riders combined is shown in Table 16.

TABLE 16  
PARKING FACILITY USED BY ALL AUTO SHOPPERS IN 1955

| Place of Parking        | Weekday | Saturday |
|-------------------------|---------|----------|
|                         | percent | percent  |
| Curb                    | 36.5    | 33.8     |
| New Lot                 | 9.8     | 11.8     |
| Other Lots              | 20.5    | 18.0     |
| Garage A                | 3.0     | 4.7      |
| Other Garages           | 10.4    | 14.7     |
| Other Places            | 0.0     | 0.8      |
| Not Parked or Not Known | 19.8    | 16.2     |

As might have been expected, this table shows some lowering of percentages at various facilities, due to the number of cars not parked or for which the parking place is unknown. Those cars whose parking place was known appear to have followed about the same pattern as those of the drivers.

TABLE 17  
AVERAGE PURCHASE PER DRIVER SHOPPER BY PLACE OF PARKING

| Place of Parking | Weekday        |      | Saturday       |      |
|------------------|----------------|------|----------------|------|
|                  | 1954           | 1955 | 1954           | 1955 |
|                  | <i>Dollars</i> |      | <i>Dollars</i> |      |
| Curb             | 4.40           | 2.50 | 5.70           | 2.30 |
| New Lot          | —              | 5.10 | —              | 6.10 |
| Other Lots       | 4.70           | 2.60 | 4.20           | 3.40 |
| Garage A         | 7.00           | 5.80 | 6.80           | 4.20 |
| Other Garages    | 4.00           | 2.50 | 2.80           | 0.60 |
| Other Places     | 2.80           | 0.40 | 6.20           | —    |
| Total            | 4.90           | —    | 5.20           | —    |

While reflecting the decline in purchases in 1955, Table 17 shows that customers who park at Garage A continue to spend larger amounts at the store than do those shoppers parking elsewhere, except at the new lot. This could be interpreted as added proof that the amount spent is inversely proportional to the distance walked from the place of parking. Some of the results of the survey made of customers of the new lot substantiated this (see Appendix C, Table D).

Table 18 shows the over-all wisdom of catering to the auto-driver shoppers. Their average purchase is higher than that of shoppers by any other

TABLE 18  
AVERAGE PURCHASE PER SHOPPER BY MODE OF TRAVEL IN 1954

|                | Weekday        | Saturday       |
|----------------|----------------|----------------|
|                | <i>Dollars</i> | <i>Dollars</i> |
| Auto Driver    | 4.90           | 5.20           |
| Auto Passenger | 4.50           | 3.40           |
| City Bus       | 3.30           | 2.90           |
| Inter-City Bus | 3.50           | 2.00           |
| Taxi           | 6.60           | 4.00           |
| Walk           | 2.60           | 3.20           |
| Other          | 3.00           | 1.20           |

mode of travel, except those infrequent shoppers who ride taxis. Specifically, each auto customer spends about half again as much as the customers coming by bus.

TABLE 19  
PERCENTAGE OF PURCHASES IN EACH DEPARTMENT BY MODE OF TRAVEL (1954)

| Department            | Auto    |          | City Bus |          | Inter-City Bus |          | Taxi    |          | Walk    |          | Other   |          |
|-----------------------|---------|----------|----------|----------|----------------|----------|---------|----------|---------|----------|---------|----------|
|                       | Weekday | Saturday | Weekday  | Saturday | Weekday        | Saturday | Weekday | Saturday | Weekday | Saturday | Weekday | Saturday |
|                       | percent | percent  | percent  | percent  | percent        | percent  | percent | percent  | percent | percent  | percent | percent  |
| Women's Ready-to-Wear | 65.7    | 67.4     | 24.0     | 15.8     | 2.6            | 1.6      | 0.4     | 0.0      | 7.3     | 15.2     | 0.0     | 0.0      |
| Small Wares—Notions   | 60.7    | 61.0     | 24.7     | 27.0     | 1.7            | 5.1      | 0.6     | 0.0      | 11.7    | 12.6     | 0.6     | 0.3      |
| Women's Acces.        | 71.1    | 70.3     | 20.1     | 14.5     | 0.0            | 0.0      | 0.0     | 0.0      | 8.8     | 14.5     | 0.0     | 0.7      |
| Major Appli.          | 71.2    | 81.6     | 8.6      | 18.4     | 0.0            | 0.0      | 0.0     | 0.0      | 20.2    | 0.0      | 0.0     | 0.0      |
| Lingerie              | 66.3    | 63.9     | 20.8     | 20.3     | 2.6            | 1.9      | 0.3     | 2.1      | 9.6     | 11.8     | 0.4     | 0.0      |
| Furniture             | 76.9    | 95.5     | 11.8     | 3.5      | 0.0            | 0.0      | 0.0     | 0.0      | 11.3    | 1.0      | 0.0     | 0.0      |
| Children's Apparel    | 69.3    | 76.3     | 22.8     | 22.5     | 1.2            | 0.9      | 0.8     | 0.0      | 4.9     | 0.0      | 1.0     | 0.0      |
| Home Furnishings      | 66.6    | 77.4     | 25.1     | 13.1     | 1.1            | 0.8      | 0.1     | 0.0      | 7.0     | 8.7      | 0.1     | 0.0      |
| Women's Shoes         | 65.2    | 68.6     | 28.0     | 29.4     | 0.0            | 0.0      | 1.0     | 0.0      | 5.8     | 2.0      | 0.0     | 0.0      |
| Luggage               | 69.0    | 67.7     | 26.8     | 32.3     | 0.0            | 0.0      | 0.0     | 0.0      | 4.2     | 0.0      | 0.0     | 0.0      |
| Children's Shoes      | 75.0    | 73.3     | 22.7     | 26.7     | 0.0            | 0.0      | 0.0     | 0.0      | 2.3     | 0.0      | 0.0     | 0.0      |
| Toys                  | 74.7    | 58.6     | 24.1     | 41.4     | 0.6            | 0.0      | 0.0     | 0.0      | 0.6     | 0.0      | 0.0     | 0.0      |
| Millinery             | 73.4    | 72.4     | 14.5     | 18.4     | 3.2            | 2.6      | 0.0     | 6.6      | 8.9     | 0.0      | 0.0     | 0.0      |
| Candy                 | 74.1    | 68.4     | 14.8     | 31.6     | 0.0            | 0.0      | 0.0     | 0.0      | 11.1    | 0.0      | 0.0     | 0.0      |
| Men's Clothing        | 67.4    | 67.1     | 20.8     | 23.3     | 2.2            | 1.7      | 0.5     | 0.0      | 7.0     | 7.2      | 2.1     | 0.7      |
| Yard Goods            | 70.9    | 72.3     | 23.1     | 24.5     | 0.1            | 0.0      | 3.0     | 0.0      | 2.8     | 3.2      | 0.1     | 0.0      |
| Other                 | 70.8    | 67.5     | 20.2     | 22.8     | 0.8            | 0.0      | 0.6     | 0.0      | 7.6     | 9.7      | 0.0     | 0.0      |
| Total                 | 72.3    | 67.6     | 17.7     | 22.5     | 1.1            | 1.4      | 0.2     | 0.5      | 8.6     | 7.7      | 0.1     | 0.3      |

Tables 19 and 20 show the percentage of sales in various departments by mode of travel used. The goods included in each of the department classifications are listed in Appendix A. The 1955 survey contained a smaller breakdown of departments in order to provide a better check with the store's figures. These tables show clearly that auto passengers and drivers account for the major portion of sales in all departments. In 1955 walkers accounted for a larger percentage of sales than in 1954, while sales to city bus riders declined. Sales to auto riders and drivers also declined somewhat on weekdays.

Tables 21 and 22, the results of which are shown graphically in Figures 6 and 7, show that sales per 1,000 population decreased in most areas. However, increased purchases are noted in the

immediate vicinity of the store and in certain areas outside Fayette County on both weekdays and Saturdays. Figure 8 shows that average purchases showed no particular trend insofar as distances

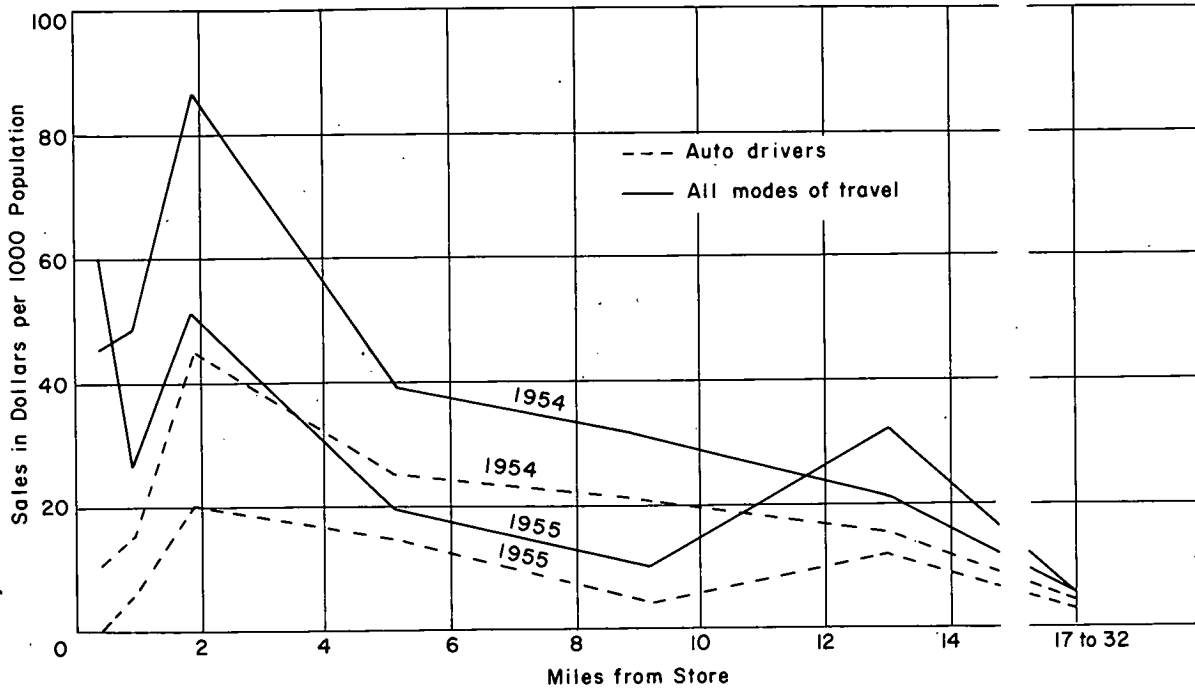


Figure 6. Sales per 1,000 population versus distance from store weekday.

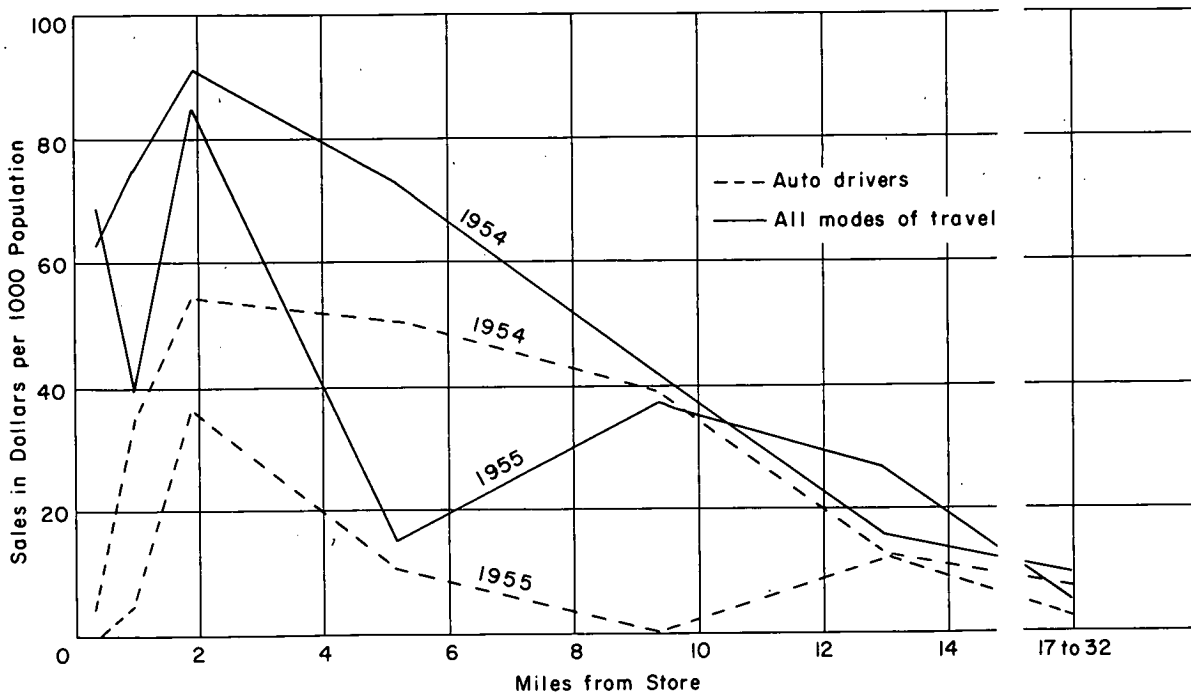


Figure 7. Sales per 1,000 population versus distance from store Saturday.



## PARKING AND BUYING HABITS

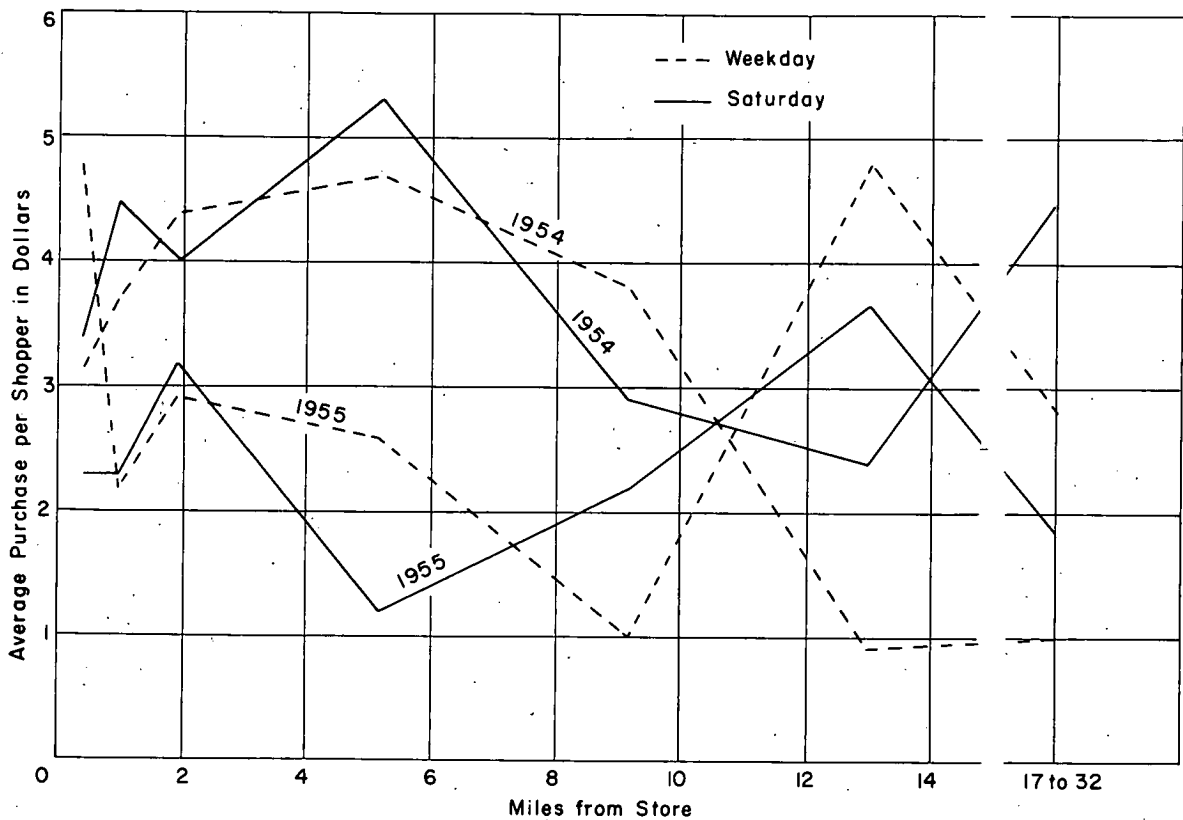


Figure 8. Average purchase per shopper versus distance traveled.

TABLE 20  
PERCENTAGE OF PURCHASES IN EACH DEPARTMENT BY  
MODE OF TRAVEL (1955)

| Department                   | All Auto |      | City Bus |      | Intercity Bus |       | Walk     |      | Other    |       |
|------------------------------|----------|------|----------|------|---------------|-------|----------|------|----------|-------|
|                              | Week-day | Sat. | Week-day | Sat. | Week-day      | Sat.  | Week-day | Sat. | Week-day | Sat.  |
| Women's Ready-to-Wear        | 71.9     | 59.5 | 6.6      | 27.0 | 1.2           | ..... | 19.2     | 13.5 | 1.1      | ..... |
| Women's Accessories          | 73.4     | 70.6 | 11.7     | 18.5 | 0.9           | ..... | 12.0     | 10.8 | 2.0      | ..... |
| Small Wares                  | 62.3     | 70.7 | 18.1     | 10.5 | 1.3           | ..... | 17.0     | 28.8 | 1.3      | ..... |
| Notions                      | 60.7     | 95.0 | 34.6     | 0.0  | 0.0           | ..... | 4.0      | 5.0  | 0.0      | ..... |
| Yard Goods                   | 64.1     | 32.1 | 23.2     | 17.0 | 0.0           | ..... | 12.7     | 50.8 | 0.0      | ..... |
| Infants' and Children's Wear | 79.9     | 87.5 | 13.7     | 12.5 | 0.0           | ..... | 5.4      | 0.0  | 1.0      | ..... |
| Men's Wear                   | 54.1     | 94.5 | 0.0      | 0.0  | 4.7           | ..... | 41.2     | 5.5  | 0.0      | ..... |
| Furniture                    | 56.8     | 87.2 | 12.8     | 12.8 | 13.6          | ..... | 16.1     | 0.0  | 0.7      | ..... |
| Home Furnishings             | 60.8     | 39.2 | 20.1     | 34.5 | 0.0           | ..... | 19.1     | 26.3 | 0.0      | ..... |
| Other                        | 66.1     | 67.6 | 14.4     | 17.8 | 3.4           | ..... | 15.1     | 14.6 | 1.0      | ..... |
| Total                        |          |      |          |      |               |       |          |      |          |       |

from the store are concerned, but, as noted pre-

viously, 1955 average purchases lagged behind the 1954 figures in most instances.

TABLE 21  
PURCHASES PER 1,000 POPULATION RELATED TO DISTANCE  
FROM STORE (WEEKDAY)

| Area             | Est. Pop. June 1954 | Est. Pop. June 1955 | Avg. Dist. From Store | Sales per 1000 Population Auto Drivers |       | Sales per 1000 Population All Modes of Travel |       | Average Purchase per Shopper All Modes of Travel |      |
|------------------|---------------------|---------------------|-----------------------|----------------------------------------|-------|-----------------------------------------------|-------|--------------------------------------------------|------|
|                  |                     |                     |                       | 1954                                   | 1955  | 1954                                          | 1955  | 1954                                             | 1955 |
| Fayette Cty.     |                     |                     | miles                 | Dollars                                |       | Dollars                                       |       | Dollars                                          |      |
| Zone 000         | 5,631               | 5,631               | 0.37                  | 10.60                                  | 0     | 45.60                                         | 60.20 | 3.10                                             | 4.80 |
| Ring 1           | 48,619              | 49,119              | 0.93                  | 15.70                                  | 6.00  | 48.60                                         | 26.20 | 3.70                                             | 2.20 |
| Ring 2           | 34,730              | 36,308              | 1.88                  | 45.00                                  | 20.10 | 86.80                                         | 51.50 | 4.40                                             | 2.90 |
| Ring 3           | 18,357              | 21,851              | 5.17                  | 25.40                                  | 14.50 | 38.80                                         | 19.60 | 4.70                                             | 2.60 |
| Ring 4           | 4,985               | 5,085               | 9.34                  | 21.00                                  | 4.60  | 31.10                                         | 10.20 | 3.80                                             | 1.00 |
| 2 Other Counties | 23,670              | 23,670              | 13                    | 15.90                                  | 11.90 | 21.20                                         | 32.10 | 0.90                                             | 4.80 |
| 8 Other Counties | 146,266             | 146,266             | 17-32                 | 4.80                                   | 3.10  | 5.70                                          | 5.70  | 1.00                                             | 2.80 |

## SUMMARY AND CONCLUSIONS

The more important results of the study are summarized below.

1. The store attracted relatively more male shoppers in 1955 than in 1954.

2. Relatively more people came shopping from work and from other points of origin (besides home) in 1955 than 1954.

3. There seemed to be little change in the pat-

tern of shoppers by hour of day leaving the store.

4. The store's clientele seem to be shifting outward from the store. More customers came from farther away in 1955 than in 1954.

5. Slightly more people traveled by auto in 1955 than in 1954 but their sales declined.

6. Fewer people traveled by public transit in 1955, but walkers increased as did the amount they purchased.

7. Auto passengers and drivers remained the store's best customers but by a smaller margin than in 1954. The average auto shopper spent considerably more than the bus riders and walkers.

8. The percentage of shoppers traveling by auto remained approximately the same throughout the range of distances traveled, though persons living in outlying areas increased their use of the automobile on Saturday in 1955.

9. The proportion of shoppers parking at the curb and in garages declined in 1955, while the percent parking in lots, including the new lot, increased.

10. The average purchase by each mode of parking decreased, but shoppers parking at Garage A continued to rank at the top, joined in 1955 by those parking in the new lot.

11. Auto customers account for the major portion of sales in all department classifications.

12. The store's business in general declined in 1955. This is reflected in the decrease of shoppers making purchases as well as in the decline of average sales, sales per 1,000 population, and average sales per each mode of parking.

Due to the many other known and unknown factors influencing retail businesses of the type involved in this study, it is not possible to separate out and assign what effect the addition of this parking lot may have had on the various items

noted above and upon the business of the store in general. However, whatever effect the parking lot may have had upon the business of the survey store, it was not beneficial enough to maintain the store's sales with respect to those in 1954. Also, the lot did not enable the store to maintain pace with its competitors. These two conclusions are borne out by the following facts:

1. In 1955 for the period of the survey the store's sales showed a decrease of 25 percent on the average weekday and 30 percent on Saturday as compared with the survey period of 1954. At the same time the Federal Reserve Board's index of department store sales in the entire city showed no change for the same period as compared with 1954.

2. For the month of June 1955 the store's sales were down 15 percent from 1954, while the Federal Reserve Board's figures show a decline for the Lexington area of only 7 percent.

It seems possible that in the final analysis, the store's relative decline in sales could be related largely to the discontinuation of free parking at Garage A. The new lot, even though operated strictly as a commercial enterprise, actually may have been an asset to the store, but if so, its effect was not sufficient to offset losses resulting from the cancellation of free garage parking. Other things being equal, it would seem reasonable that had the garage validations continued or had the lot provided equivalent free parking, the store's relative sales should not have declined.

If both validation arrangements had been provided, the results may have been quite profitable from a sales standpoint. Nevertheless, the net result of additional parking spaces, with the increased cost to the shopper, apparently was not productive in this case. However, the degree to which profits at the new lot reimbursed the store for sales losses is not known.

## APPENDIX A

### Interview Forms Used in Surveys and List of Department Classifications

#### (STUDY STORE'S) PARKING SURVEY—1954

1. Date..... 2. Time..... 3. Door..... 4. S & R.....
  5. Could we have your home address, please?  
.....
  6. Did you come shopping from (a) Home?..... (b) Work?..... (c) Other?.....
  7. Did you (a) Drive?..... (b) Ride with someone?..... (c) Ride city bus?..... (d) Ride other bus?.....  
(e) Cab?..... (f) Walk?..... (g) Other?.....
  8. If a driver, did you park (a) In a garage?..... (b) Garage "A"?..... (c) On street?..... (d) In a lot?..... (e) Other?.....
  9. Did you make a purchase? If NO (a) Just shopping?..... (b) Couldn't find?..... (c) Other?.....
  10. Would you mind telling us what you bought and how much you spent?
- | <i>Department</i>        | <i>Amount</i> | <i>Department</i>      | <i>Amount</i> |
|--------------------------|---------------|------------------------|---------------|
| a. Women's Ready-to-Wear | \$.....       | j. Small Wares—Notions | \$.....       |
| b. Women's Accessories   | \$.....       | k. Major Appliance     | \$.....       |
| c. Lingerie              | \$.....       | l. Furniture           | \$.....       |
| d. Children's Apparel    | \$.....       | m. Home Furnishings    | \$.....       |
| e. Women's Shoes         | \$.....       | n. Luggage             | \$.....       |
| f. Children's Shoes      | \$.....       | o. Toys                | \$.....       |
| g. Millinery             | \$.....       | p. Candy               | \$.....       |
| h. Men's Clothing        | \$.....       | q. Other               | \$.....       |
| i. Yard Goods            | \$.....       | r. Total               | \$.....       |
11. Wouldn't answer about merchandise.....
  12. Approximately how long were you in the store?.....
  13. Are you satisfied with (Study Store's) hours? Yes..... Would prefer.....

## STORE SURVEY QUESTIONNAIRE—1955

1. Did you start your shopping trip: From Home?..... Work?..... Other Place?..... No Ans.....
2. How did you travel to the store? (a) Drove own car (yourself?).....  
 (b) Rode with someone..... (c) Rode city bus..... (d) Intercity bus..... (e) Cab..... (f) Walked.....  
 (g) Other..... (h) No Ans.....
3. If drove own car (a) or rode with someone (b) Where was car parked?  
 (a) On street..... (b) In parking lot..... Which lot? New lot..... Other.....  
 (c) In garage..... Which garage? Garage "A"..... Other.....  
 (d) Other place of parking..... (e) Car not parked..... (driver went on)  
 (f) No answer or don't know where.....
4. Did you make a purchase in (Study Store) Yes..... No..... No Ans.....  
 (If no, skip No. 5) (If child, ask: Did you yourself make a purchase?)
5. Would you please tell us: (a) What items you purchased at (Study Store) (pause) & (b) How much you spent on each item?  
 (Check here if no answer on Items..... Amounts.....)

| <i>Items Purchased</i> | <i>Amount Spent</i> | <i>Items Purchased</i> | <i>Amount Spent</i> |
|------------------------|---------------------|------------------------|---------------------|
| .....                  | .....               | .....                  | .....               |
| .....                  | .....               | .....                  | .....               |
| .....                  | .....               | .....                  | .....               |
| .....                  | .....               | .....                  | .....               |
| .....                  | .....               | .....                  | .....               |
| .....                  | .....               | .....                  | .....               |
| .....                  | .....               | .....                  | .....               |

6. (a) Do you know (Study Store) gives trading stamps? Yes..... No..... No Ans.....  
 If yes, ask (b)  
 (b) Do you save them? Yes..... No..... If yes, ask: Regularly?..... Sometimes?.....
7. Would you please give us your home address?.....
8. *Classification Data:*  
 Sex: Male..... Female..... Race: White..... Colored.....  
 Door..... Time..... Date..... Factor.....  
 Interviewer..... Questionnaire Serial Number.....

## STUDY-LOT QUESTIONNAIRE—1955

## DRIVER

1. Did you start your trip to this lot: From home?.....Work?.....Other place.....No answer.....
2. What was the purpose or purposes of your trip downtown? (a) Shopping.....(b) Business.....  
(c) Banking.....(d) Dr. or Dentist.....(e) Eat.....(f) Work.....(g) Other.....(h) No answer.....  
If Shopping (a) is not mentioned on first request, ask as a reminder: Did you visit any stores while your car was parked here? Yes.....No.....No Answer.....
3. If driver visited stores (ask) Would you please tell us (a) What stores did you visit? (b) Did you make a purchase?, and (pause) (c) The amount of total purchases at each store?

Check here if no answer on: Stores.....Items.....Amounts.....

| Store | Check if<br>Purchase<br>Made | Amount of<br>Purchase | Store | Check if<br>Purchase<br>Made | Amount of<br>Purchase |
|-------|------------------------------|-----------------------|-------|------------------------------|-----------------------|
| ..... | .....                        | .....                 | ..... | .....                        | .....                 |
| ..... | .....                        | .....                 | ..... | .....                        | .....                 |
| ..... | .....                        | .....                 | ..... | .....                        | .....                 |
| ..... | .....                        | .....                 | ..... | .....                        | .....                 |
| ..... | .....                        | .....                 | ..... | .....                        | .....                 |

4. Did any store or other place stamp your ticket for free parking? Yes.....No.....; If yes, what store or place? (write in).....
5. Would you please give us your home address?.....
6. Classification of Driver: Sex: Male.....Female..... Race: White.....Colored.....
7. Did you bring anyone else downtown? Yes.....No.....No Ans..... If yes, How many? Total Riders.....Male.....Female.....
8. Time.....Date.....
9. Interviewer..... Serial No..... Factor.....

RIDER No. 1 Present.....Not Present.....Factor.....

(a) Did you do any shopping? Yes.....No.....  
Don't know or no answer.....

(b) If yes, what stores did you visit?.....  
Check here if no answer.....

(c) What was the total amount of purchases at each store? Check here if no answer.....

| Store | Made<br>Purchase | Total Amount<br>of Purchase | Store | Made<br>Purchase | Total Amount<br>of Purchase |
|-------|------------------|-----------------------------|-------|------------------|-----------------------------|
| ..... | .....            | .....                       | ..... | .....            | .....                       |
| ..... | .....            | .....                       | ..... | .....            | .....                       |
| ..... | .....            | .....                       | ..... | .....            | .....                       |
| ..... | .....            | .....                       | ..... | .....            | .....                       |
| ..... | .....            | .....                       | ..... | .....            | .....                       |

(d) Would you please give us your home address? No Ans.....

Note: Actual lot interview questionnaire provided additional space for shopping information regarding Riders 2, 3, and 4, also.

## DEPARTMENT CLASSIFICATIONS (1954)

## YARD GOODS

Silks, Velvets, Synthetics, Cottons, Woolens, Linens, Domestics, Muslin, Towels, Sheeting, Blankets, Spreads, Comfortables, Patterns.

## MAJOR APPLIANCES

Refrigerators, Freezers, Radios, TV's, Washers, Dryers, Ironers, Sweepers, Stoves, Sewing machines, Kitchen equipment.

## FURNITURE

Sofas, Chairs, Beds and bedding, Tables, Chests, Infants and Tots furniture.

## HOME FURNISHINGS

Rugs, Carpeting, Floor coverings, Draperies, Curtains, Upholstery, Blinds, Lamps, Shades, China, Glassware, Metalware (silver), Small (household) electric appliances, Gifts, Housewares.

## SMALL WARES—NOTIONS

Cosmetics, Stationery, Costume jewelry, Toilet articles, Umbrellas, Drug sundries, Books and magazines, Art needlework, Laces, Embroidery and Trimmings.

## CANDY

## TOYS

## LUGGAGE

## MILLINERY

Hats and hat bar.

## MEN'S CLOTHING

Furnishings and accessories, Hats, Caps, Ties, Leisure wear, Scarfs, Handkerchiefs, Hose, Underwear, Shirts.

## WOMEN'S READY-TO-WEAR

Women's, Misses, Juniors and Teenage Coats, Suits, Dresses, Sportswear, Furs, Maternity wear, Uniforms and aprons, Budget dresses.

## WOMEN'S SHOES

## CHILDREN'S APPAREL

Infants, Tots, Boys, Girls and Pre-teenage wear.

## CHILDREN'S SHOES

## WOMEN'S ACCESSORIES

Neckwear and scarfs, Handkerchiefs, Gloves, Hosiery, Handbags and small leather goods, Inexpensive blouses and sweaters.

## LINGERIE

Bra bar, Underwear, Negligees, Robes, Foundations.

## OTHER

Beauty salon, Stauffer system, Photo studio, Alterations, Fur storage, Appliance service.

Note: In the 1955 survey millinery, lingerie, and women's shoes were grouped with women's accessories; children's shoes with children's apparel; and candy, toys and luggage with other.

## APPENDIX B

### Miscellaneous Tabulations From Store Surveys

**TABLE A**  
**STORE HOUR PREFERENCES OF ALL SHOPPERS (1954)**

|          | Satisfied | Other Preference |            |                |                   |                   | Other |
|----------|-----------|------------------|------------|----------------|-------------------|-------------------|-------|
|          |           | Open Earlier     | Open Later | Open One Night | Open Monday Night | Open Friday Night |       |
|          |           | <i>percent</i>   |            |                |                   |                   |       |
| Weekday  | 93.4      | 0.2              | 0.6        | 4.9            | 0.4               | 0.0               | 0.5   |
| Saturday | 90.2      | 0.3              | 0.9        | 8.0            | 0.2               | 0.2               | 0.2   |

**TABLE B**  
**PERCENTAGE OF SHOPPERS MAKING PURCHASES AND REASONS FOR NON-PURCHASES (1954)**

|          | Made Purchase  | No Purchase    |                |                |
|----------|----------------|----------------|----------------|----------------|
|          |                | Just Shopping  | Couldn't Find  | Other Reasons  |
|          | <i>percent</i> | <i>percent</i> | <i>percent</i> | <i>percent</i> |
| Weekday  | 52.9           | 25.9           | 11.0           | 10.2           |
| Saturday | 54.6           | 25.1           | 11.4           | 8.9            |

**TABLE C**  
**PERCENTAGE OF SHOPPERS SAVING TRADING STAMPS (1955)**

|                   | Saturday                |                            |
|-------------------|-------------------------|----------------------------|
|                   | Persons Making Purchase | Persons Making No Purchase |
| Save Regularly    | 62.8                    | 62.3                       |
| Save Sometimes    | 8.7                     | 3.2                        |
| Know About        |                         |                            |
| But Don't Save    | 9.9                     | 9.8                        |
| Didn't Know       |                         |                            |
| Stamps Were Given | 17.8                    | 24.1                       |
| No Answer         | 0.8                     | 0.6                        |
| Total             | 100.0                   | 100.0                      |

|                   | Weekday                 |                            |
|-------------------|-------------------------|----------------------------|
|                   | Persons Making Purchase | Persons Making No Purchase |
| Save Regularly    | 64.8                    | 57.7                       |
| Save Sometimes    | 5.8                     | 4.0                        |
| Know About        |                         |                            |
| But Don't Save    | 16.4                    | 18.5                       |
| Didn't Know       |                         |                            |
| Stamps Were Given | 12.1                    | 19.0                       |
| No Answer         | 0.9                     | 0.8                        |
| Total             | 100.0                   | 100.0                      |

# APPENDIX C

## Tabulations From 1955 Parking Lot Survey

TABLE A  
SURVEY-STORE SHOPPERS AND PURCHASES BY  
RESIDENCE RINGS

| Residence<br>Ring | Average<br>Distance<br>From Lot | Shoppers | Customers | Total<br>Purchases | Purchase<br>Per Customer<br>Per Ring | Purchase<br>Per Shopper<br>Per Ring |
|-------------------|---------------------------------|----------|-----------|--------------------|--------------------------------------|-------------------------------------|
| Average Weekday   |                                 |          |           |                    |                                      |                                     |
| 0                 | 0.37 Mi.                        | 2.1      | 0         | 0                  | 0                                    | 0                                   |
| 1                 | 0.93 "                          | 20.5     | 11.3      | \$148.58           | \$13.20                              | \$7.24                              |
| 2                 | 1.88 "                          | 34.9     | 20.8      | 300.45             | 14.46                                | 8.60                                |
| 3                 | 5.17 "                          | 11.6     | 7.0       | 47.68              | 6.77                                 | 4.12                                |
| 4                 | 9.34 "                          | 1.6      | 0.8       | 13.16              | 16.04                                | 8.02                                |
| 13 Mi.            | 13 "                            | 10.7     | 6.2       | 53.60              | 8.62                                 | 5.01                                |
| 17-32 Mi.         | 17-32 "                         | 19.6     | 8.7       | 220.24             | 25.32                                | 11.23                               |
| Other             |                                 | 20.0     | 9.7       | 204.92             | 21.13                                | 10.23                               |
| All<br>Residences |                                 | 121.0    | 64.5      | 988.63             | 15.33                                | 8.17                                |
| Saturday          |                                 |          |           |                    |                                      |                                     |
| 0                 | 0.37 Mi.                        | —        | —         | —                  | —                                    | —                                   |
| 1                 | 0.93 "                          | 36.4     | 14.3      | \$315.05           | \$22.03                              | \$8.66                              |
| 2                 | 1.88 "                          | 55.2     | 25.6      | 500.00             | 19.53                                | 9.06                                |
| 3                 | 5.17 "                          | 12.5     | 10.1      | 129.85             | 12.86                                | 10.39                               |
| 4                 | 9.34 "                          | 4.6      | 4.6       | 28.30              | 6.15                                 | 6.15                                |
| 13 Mi.            | 13 "                            | 8.2      | 6.0       | 31.70              | 5.28                                 | 3.87                                |
| 17-32 Mi.         | 17-32 "                         | 10.2     | 6.2       | 74.50              | 12.02                                | 7.30                                |
| Other             |                                 | 15.2     | 4.5       | 94.08              | 20.91                                | 6.19                                |
| All<br>Residences |                                 | 142.3    | 71.3      | 1,173.48           | 16.46                                | 8.25                                |

TABLE B  
PARKERS' PURPOSE OF TRIP

| Purpose                               | Weekday |            | Saturday |            |
|---------------------------------------|---------|------------|----------|------------|
|                                       | Drivers | Passengers | Drivers  | Passengers |
|                                       | percent | percent    | percent  | percent    |
| Shopping only                         | 47.8    | 47.6       | 55.8     | 67.2       |
| Shopping and<br>any others            | 23.9    | 3.5        | 19.1     | 5.1        |
| Business                              | 11.8    | 47.5       | 7.5      | 27.7       |
| Banking                               | 4.8     | 1.4        | 7.4      | —          |
| Doctor or Dentist                     | 2.7     | —          | 2.1      | —          |
| Eat                                   | 1.3     | —          | —        | —          |
| Work                                  | 1.6     | —          | 0.7      | —          |
| Others                                | 3.1     | —          | 5.8      | —          |
| Comb. that do not<br>include shopping | 3.0     | —          | 1.6      | —          |
| Total                                 | 100.0   | 100.0      | 100.0    | 100.0      |

TABLE C  
SEX AND RACE OF PARKERS

| Sex and Race   | Weekday |            | Saturday |            |
|----------------|---------|------------|----------|------------|
|                | Drivers | Passengers | Drivers  | Passengers |
|                | percent | percent    | percent  | percent    |
| Female White   | 50.0    | 74.1       | 35.5     | 85.3       |
| Female Colored | 1.9     | 4.7        | 1.4      | 11.7       |
| Male White     | 45.1    | 19.8       | 62.3     | 3.0        |
| Male Colored   | 3.0     | 1.4        | 0.8      | —          |
| Total          | 100.0   | 100.0      | 100.0    | 100.0      |

TABLE D  
CUSTOMERS, SHOPPERS AND PURCHASES BY STORE RINGS

| Store Ring | Distance<br>From Lot<br>(in feet) | Shoppers | Customers | Total<br>Purchases | Purchase<br>Per Customer<br>Per Ring | Purchase<br>Per Shopper<br>Per Ring |
|------------|-----------------------------------|----------|-----------|--------------------|--------------------------------------|-------------------------------------|
| Weekday    |                                   |          |           |                    |                                      |                                     |
| A          | 0- 450                            | 203.6    | 102.9     | \$1,655.88         | \$16.10                              | \$8.13                              |
| B          | 451- 900                          | 156.4    | 101.1     | 660.89             | 6.54                                 | 4.22                                |
| C          | 901-1,200                         | 55.5     | 33.3      | 281.26             | 8.46                                 | 5.07                                |
| D          | 1,201-1,500                       | 33.4     | 17.4      | 112.41             | 6.46                                 | 3.37                                |
| E          | 1,501-1,800                       | 23.8     | 13.8      | 164.73             | 11.92                                | 6.92                                |
| F          | 2,150                             | 10.4     | 6.5       | 35.29              | 5.43                                 | 3.39                                |
| G          | 2,450                             | 5.0      | 0.8       | 15.58              | 20.50                                | 3.13                                |
| All Stores |                                   | 488.2    | 275.8     | 2,926.04           | 10.61                                | 5.99                                |
| Saturday   |                                   |          |           |                    |                                      |                                     |
| A          | 0- 450                            | 294.7    | 146.5     | \$2,968.35         | \$20.26                              | \$10.07                             |
| B          | 451- 900                          | 203.2    | 71.7      | 669.91             | 9.34                                 | 3.30                                |
| C          | 901-1,200                         | 62.4     | 31.4      | 199.51             | 6.35                                 | 3.20                                |
| D          | 1,201-1,500                       | 76.1     | 35.9      | 141.97             | 3.95                                 | 1.87                                |
| E          | 1,501-1,800                       | 34.0     | 12.6      | 463.70             | 36.80                                | 13.64                               |
| F          | 2,150                             | 24.2     | 11.9      | 394.40             | 33.14                                | 16.30                               |
| G          | 2,450                             | 8.7      | 4.4       | 247.50             | 56.25                                | 28.45                               |
| All Stores |                                   | 703.3    | 314.4     | 5,085.34           | 16.17                                | 7.23                                |

TABLE E  
VALIDATION OF PARKING BY ORIGIN OF DRIVER

| Origin Validating<br>Group |            | Weekday                       |                             | Saturday                      |                             |
|----------------------------|------------|-------------------------------|-----------------------------|-------------------------------|-----------------------------|
|                            |            | Percent of Total<br>Validated | Percent of Total<br>Parking | Percent of Total<br>Validated | Percent of Total<br>Parking |
| Home                       | None       | —                             | 74.1                        | —                             | 80.0                        |
|                            | Banks      | 29.9                          | 2.8                         | 58.9                          | 5.5                         |
|                            | Other      | —                             | —                           | —                             | —                           |
|                            | Businesses | 35.1                          | 3.5                         | 27.1                          | 2.5                         |
| Work                       | Total      | 65.0                          | 80.4                        | 86.0                          | 88.0                        |
|                            | None       | —                             | 10.2                        | —                             | 4.9                         |
|                            | Banks      | 25.6                          | 2.5                         | 14.0                          | 1.2                         |
|                            | Other      | —                             | —                           | —                             | —                           |
| Other                      | Businesses | 6.3                           | 0.7                         | —                             | —                           |
|                            | Total      | 31.9                          | 13.4                        | 14.0                          | 6.1                         |
|                            | None       | —                             | 5.9                         | —                             | 5.9                         |
|                            | Banks      | —                             | —                           | —                             | —                           |
| All Origins                | Other      | —                             | —                           | —                             | —                           |
|                            | Businesses | 3.1                           | 0.3                         | —                             | —                           |
|                            | Total      | 3.1                           | 6.2                         | —                             | 5.9                         |
| All Origins                |            | 100.0                         | 100.0                       | 100.0                         | 100.0                       |



## PARKING AND BUYING HABITS

TABLE F  
VALIDATION OF PARKING BY TYPE OF BUSINESS

| Validating Group | Weekday                             |                          | Saturday                            |                          |
|------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
|                  | Percent of Total Validated          | Percent of Total Parking | Percent of Total Validated          | Percent of Total Parking |
| None             |                                     | 90.2                     |                                     | 90.7                     |
| Banks            | 55.5                                | 5.4                      | 72.9                                | 6.8                      |
| Other Businesses | 44.5                                | 4.4                      | 27.1                                | 2.5                      |
| All Groups       | 100.0                               | 100.0                    | 100.0                               | 100.0                    |
|                  | Percent of Total Parkers Validating |                          | Percent of Total Parkers Validating |                          |
| All Groups       | 9.8                                 |                          | 9.3                                 |                          |

TABLE G  
SHOPPER-DRIVER CAR PURCHASES BY RESIDENCE RINGS

| Residence Ring | Average Distance From Lot (miles) | Shopper Cars | Customer Cars | Total Car Purchases | Purchase Per Customer Car Per Ring | Purchase Per Shopper Car Per Ring |
|----------------|-----------------------------------|--------------|---------------|---------------------|------------------------------------|-----------------------------------|
| Weekday        |                                   |              |               |                     |                                    |                                   |
| 0              | 0.37                              | 1.7          | 1.3           | \$ 18.36            | \$14.12                            | \$10.68                           |
| 1              | 0.93                              | 34.9         | 28.2          | 492.51              | 17.49                              | 14.10                             |
| 2              | 1.88                              | 52.0         | 44.4          | 1,180.62            | 26.59                              | 22.70                             |
| 3              | 5.17                              | 21.2         | 16.9          | 213.73              | 12.62                              | 10.10                             |
| 4              | 9.34                              | 5.1          | 4.7           | 167.41              | 35.93                              | 33.09                             |
| 13 Miles       | 13                                | 16.4         | 14.3          | 336.48              | 23.46                              | 20.49                             |
| 17-32 Miles    | 17-32                             | 28.8         | 24.9          | 694.72              | 27.92                              | 24.14                             |
| Other          |                                   | 26.3         | 21.6          | 635.84              | 29.41                              | 24.19                             |
| All Residences |                                   | 186.4        | 156.3         | 3,739.67            | 23.93                              | 20.06                             |
| Saturday       |                                   |              |               |                     |                                    |                                   |
| 0              | 0.37                              |              |               |                     |                                    |                                   |
| 1              | 0.93                              | 60.9         | 50.9          | 870.83              | 17.11                              | 14.30                             |
| 2              | 1.88                              | 71.2         | 55.0          | 1,852.54            | 33.68                              | 26.02                             |
| 3              | 5.17                              | 32.0         | 29.8          | 786.08              | 26.38                              | 24.57                             |
| 4              | 9.34                              | 9.1          | 9.1           | 66.55               | 7.31                               | 7.31                              |
| 13 Miles       | 13                                | 22.8         | 22.8          | 391.51              | 17.17                              | 17.17                             |
| 17-32 Miles    | 17-32                             | 21.7         | 21.7          | 554.07              | 25.53                              | 25.53                             |
| Other          |                                   | 22.5         | 20.7          | 809.37              | 39.10                              | 35.97                             |
| All Residences |                                   | 240.2        | 210.0         | 5,330.95            | 25.39                              | 22.19                             |

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